

# ***Azure-Udemy-Questions***

## **AZ-900**

### **Section 1: Azure Compute**

**1. A company is planning on using the Azure virtual machine service. Their development team is going to deploy an application on a set of Azure virtual machines. They want to protect their virtual machine infrastructure from any sort of data center level failures. Which of the following feature can help to achieve this requirement?**

- Ans: Availability zones

**2. Which of the following in Azure is used to hold related resources for an Azure solution?**

- Ans: Resource Groups

**3. A company wants to host a set of Azure virtual machines. They have the following requirements in place**

**a) Have hardware isolation at the physical server level.**

**b) Be able to control the maintenance events initiated by the Azure platform**

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

- Ans: Azure Dedicated Host

**4. A company is planning on hosting a set of Azure virtual machines. One set is going to be hosted in the Central US location and the other set in the East US location. Would the cost for hosting the Azure virtual machine be the same , assuming the instance size and other aspects the same when it comes to the virtual machines?**

- Ans: No

**5. Which of the following is a managed service on the Azure platform that allows you to host web-based applications?**

- Ans: Azure Web Apps is a managed platform that can be used for hosting your web-based applications.

**6. Which of the following is a serverless service available on the Azure platform?**

- Azure Virtual Machines
- Azure functions
- Azure webapps
- Azure kubernetes
- Ans: Azure Functions

**7. Your team is planning on using the Azure Virtual Desktop service. Does the service support desktop virtualization?**

- Ans: Yes

**8. Your team is planning on using the Azure Virtual Desktop service. Does the service support application virtualization?**

- Ans: Yes

**9. Your company wants to host a container-based application on the Azure platform. Can they use Azure Kubernetes for hosting the application?**

- Ans: Yes

**10. Which of the following resource gets created along with an Azure Web App?**

- Ans: App service Plan



## **Section 2: Networking**

**1. Which of the following feature is used to establish communication between two Azure virtual networks?**

- Ans: Azure virtual network peering

**2. A company is planning on hosting a set of Azure virtual machines. Which of the following is used to isolate the virtual machines in Azure?**

- Ans: Azure virtual networks

**3. A company currently has an on-premises data center that they want to connect their Azure virtual networks. Which of the following could be used to establish the network connectivity?**

- Ans: Azure VPN Gateway

**4. A team is planning on hosting an application on a set of Azure virtual machines. They are planning on using Network Security Groups to control the Inbound and Outbound Traffic from the virtual machines. Can you apply the Network Security Group to the network interface attached to the virtual machines?**

- Ans: Yes

**5. A team is planning on hosting an application on a set of Azure virtual machines. They are planning on using Network Security Groups to control the Inbound and Outbound Traffic from the virtual machines. Can you apply the Network Security Group to the subnet that holds the Azure virtual machines?**

- Ans: Yes

**6. A team is planning on hosting an application on a set of Azure virtual machines. They are planning on using Network Security Groups to control the Inbound and Outbound Traffic from the virtual machines. Can you apply the Network Security Group to the entire Azure virtual network that holds the Azure virtual machines?**

- Ans: No

**7. Which of the following configuration of the Load Balancer is used to forward traffic to one or more instances in the backend pool?**

- Ans: Load Balancing rules

**8. Which of the following is used to provide a dedicated and private connection from an on-premises data center onto Azure?**

- Ans: ExpressRoute

**9. You currently have an Azure virtual network named app-network defined as part of your Azure subscription in the East US region. You have to deploy an Azure virtual machine in the Central US location. Can you deploy the virtual machine onto app-network?**

- Ans: No

**10. Can you use the Azure DNS service to buy a domain?**

- Ans: No



## **Section 3: Storage**

**1. A development team is planning on creating a General Purpose-V2 storage account. They want to store files and ensure that each is accessible via a unique URL. Which of the following is the right service within Azure Storage Accounts that can be used for this purpose?**

- Blob
- File
- Queue
- Table
- Ans: Blob

**2. A company is planning on using Azure Storage Accounts and using the paired-region facility when it comes to data redundancy. Can you decide which paired region is used by the underlying Azure storage service?**

- Ans: No

**3. Which of the following is a command-line utility that can be used to transfer data to the Blob service in an Azure Storage Account?**

- Ans: AzCopy



## **Section 4: Databases**

**1. Which of the following is a fully managed NoSQL database service in Azure?**

- Ans: Azure Cosmos DB

**2. Which of the following service can be used to host a SQL data warehouse in Azure?**

- Ans: Azure Synapse Analytics

**3. Which of the following is NOT a benefit of the Azure Cosmos DB service?**

- Faster Access to data
- Access to different API for storage of data
- Full administrative access to underlying database server
- Ans: Full Administrative access to underlying database server

**4. Your team is planning on using the Azure SQL database service. Would the team get full administrative access to the underlying compute machine that hosts the SQL database?**

- Ans: No

**5. Which of the following service provides a platform that can be used to store, analyze and model datasets with solutions from BI to machine learning?**

- Ans: Azure databricks

## **Section 5: Cloud Concepts**

**1. Which of the following is the right cloud-computing service type for the Azure service – Azure SQL database?**

- Ans: Platform as a service

**2. Which of the following is the right cloud-computing service type for the Azure service – Azure virtual machines?**

- Ans: Infrastructure as a service

**3. Which of the following is the responsibility of the Azure cloud platform when it comes to the Shared Responsibility model?**

- Ans: Maintenance of physical hosts

**4. Which of the following is the responsibility of the customer when it comes to the Shared Responsibility model?**

- Ans: Management of information and data

**5. A company currently has application hosted in their on-premises data center. They want to expand their current capabilities by using services on the Azure cloud. Which of the following is the correct model type when it comes to this scenario?**

- Ans: Hybrid Cloud

**6. A company is currently planning on setting up an environment on Azure. It will be used to host an application. The company wants to ensure that the application is made available in another region in Azure if the primary Azure region hosting the application infrastructure goes down. Which of the following is the core cloud strategy being used here?**

- Ans: Disaster Recovery

**7. Which of the following is a core benefit of the Azure cloud platform?**

- Ans: Paying for services based on usage

**8. A company is planning on having their own private cloud infrastructure. Which of the following is an advantage of having a private cloud infrastructure in place?**

- Ans: Able to deliver a higher level of security

## **Section 6: Other Services**

**1. A company's DevOps team is planning on using the Azure DevOps suite of tools. Which of the following within Azure DevOps can be used to host Git-based repositories?**

- Ans: Azure Repos

**2. A company's DevOps team is planning on using the Azure DevOps suite of tools. Which of the following within Azure DevOps can be used for continuous delivery purposes ?**

- Ans: Azure pipelines

**3. A company is planning on developing an Artificial Intelligence-based application. Here they want to make use of various services on the Azure platform for the development and deployment of the application. They want to use a managed service where they can build, train and deploy models that can be subsequently used by the application. Which of the following could be used for this requirement?**

- Ans: Azure Machine Learning

**4. A company is planning on developing an Artificial Intelligence-based application. Here they want to make use of various services on the Azure platform for the development and deployment of the application. They want to use managed Vision and Speech services that could be used by the application. Which of the following could be used for this requirement?**

- Ans: Azure Cognitive Services

**5. A company wants to manage a test environment for their development team. The team should be able to get virtual machines in Azure for their development needs. They want to ensure that developers can quickly create machines based on pre-build templates. They also want to ensure that teams don't need to wait for approvals for creating the machines. Which of the following service can be used for this requirement?**

- Ans: Azure Devtest labs

**6. A company wants to build workflows on the Azure platform. They don't want the burden of managing the underlying infrastructure. Which of the following service can be used for this requirement?**

- Ans: Azure logic apps

**7. Can you make use of the Azure Key vault service for the storage of Certificates?**

- Ans: Yes

**8. Can you make use of the Azure Key vault service for the storage of Encryption Keys?**

- Ans: Yes

**9. Can you make use of the Azure Key vault service for the storage of Documents?**

- Ans: No

**10. Which of the following service makes use of Point-of-Presence locations to distribute traffic across the world?**

- Ans: Azure Content delivery network

## Section 7: Identity and Access

**1. Your company is planning on using the Microsoft Defender for Cloud. Can you create network rules in Microsoft Defender for Cloud to filter traffic that flows into Azure virtual machines?**

- Ans: No

**2. Your company is planning on using the Microsoft Defender for Cloud service. Can you get recommendations on how to improve the security of your Azure infrastructure?**

- Ans: Yes

**3. Your company is planning on using the Microsoft Defender for Cloud service. Can you view the regulatory compliance of your Azure resources in Azure Security Center?**

- Ans: Yes

**4. A company has a set of Azure virtual machines hosted in an Azure virtual network. They want to protect all of the virtual machines in the virtual network. They want to be able to create Application and Network Rules that applies to the entire virtual network. Can they use the Azure DDoS protection service for this requirement?**

- Ans: No

**5. A company has a set of Azure virtual machines hosted in an Azure virtual network. They want to protect all of the virtual machines in the virtual network. They want to be able to create Application and Network Rules that applies to the entire virtual network. Can they use the Azure Firewall service for this requirement?**

- Ans: Yes

**6. A company has a set of Azure virtual machines hosted in an Azure virtual network. They want to protect all of the virtual machines in the virtual network. They want to be able to create Application and Network Rules that applies to the entire virtual network. Can they use the Azure Network Security Groups for this requirement?**

- Ans: No

**7. Is Authentication the process of granting access to perform an action?**



- Ans: No

**8. A company is planning on using Azure Active Directory. Can you create Azure virtual machines using Azure Active Directory?**

- Ans: No

**9. A company is planning on using Azure Active Directory. Can you create users within Azure Active Directory?**

- Ans: Yes

**10. A company is planning on using Azure Active Directory. Can you create groups within Azure Active Directory?**

- Ans: Yes

**11. A company has a set of resources defined as part of their Azure subscription. They want to manage access to the resources. Which of the following can be used for this requirement?**

- Ans: RBAC(Role Based Access Control)

**12. Which of the following is a cloud-native security information event management and security orchestration automated response solution?**

- Ans: Microsoft Sentinel

**13. Is Verify explicitly a guiding principle when it comes to Zero Trust?**

- Ans: Yes

**14. Is Assume breach a guiding principle when it comes to Zero Trust?**

- Ans: Yes

**15. Is Disaster Recovery a guiding principle when it comes to Zero Trust?**

- Ans: No

## **Section 8: Azure Management and Governance**

**1. A company is evaluating the cost of hosting applications on the Azure platform. They are currently evaluating data transfer costs from their on-premises infrastructure**

**to Azure. Is there a charge for Data Transfer into Azure Data Centers?**

- Ans: No

**2. A company is evaluating the cost of hosting applications on the Azure platform. They are currently evaluating data transfer costs to their on-premises infrastructure from Azure. Is there a charge for Data Transfer out of Azure Data Centers?**

- Ans: Yes

**3. A company is planning to create a subscription and a tenant on Azure. They are evaluating the Service Level Agreement for various services. Are the SLA for Azure Virtual Machines the same irrespective of whether they are deployed across Availability Sets or Availability Zones?**

- Ans: No

**4. A company is planning to create a subscription and a tenant on Azure. They are evaluating the Service Level Agreement for various services. Is an SLA provided by the Azure AD Free Edition?**

- Ans: No

**5. A company has just setup an Azure subscription and an Azure tenant. They are looking at purchasing an Azure Support plan. Below are the key requirements when deciding upon the plan**

**a) 24/7 access to technical support by email and phone**

**b) Save on monthly costs**

**Which of the following would meet this requirement?**

- Basic Plan
- Developer Plan
- Standard Plan
- Professional Direct Plan
- Ans: Standard Plan

**6. A company is planning on setting up a subscription an Azure AD tenant. They have several departments that will be creating resource on the Azure platform. They want a way to ensure the billing is applied department wise. Which of the following can be used for this requirement?**

- Ans: Azure Resource Tags

**7. Which of the following allows you to use your existing on-premises Windows Server or SQL Server licenses to save on costs when hosting similar virtual machine workloads on Azure?**

- Ans: Azure Hybrid Benefit

**8. A company is planning on creating a set of virtual machines in the East US location. Currently they have a restriction of hosting only 20 vCPUs in this region. What can they do to ensure that they can create virtual machines that span's more than a total of 20 vCPUs in the East US location?**

- Ans: Submit request to azure support for quota increase

**9. A company is planning on using an Azure service which is currently in public preview. Is an SLA provided for services that are in public preview?**

- Ans: No

**10. A company is planning on hosting a set of resources in Azure. The company wants to ensure that all resources have resource tags assigned to them when they are created. Which of the following service can be used for this requirement?**

- Ans: Azure Policies

**11. Which of the following allows you to easily manage access , policies, and compliance across multiple subscriptions?**

- Ans: Azure Management Groups

**12. A company has a set of resources defined as part of their Azure subscription. They want to prevent accidental deletion of resources. Which of the following can be used for this requirement?**

- Ans: Resource Locks

**13. A company is planning on setting up a set of Azure virtual machines. The virtual machines will be hosting a set of applications. They want to direct the application and virtual machines logs to a central repository. Which of the following can they use for this requirement?**

- Ans: Azure Log Analytics Workspace

**14. A company is setting up an Azure subscription and an Azure tenant. They want to be notified when an issue occurs to a particular Azure service. Which of the following can be used for this requirement?**

- Ans: Azure Service Health

**15. A team member has deleted an Azure virtual machine. You need to know details of the activity when it came to the deletion of the Azure virtual machine. Which of the following can be used for this requirement?**

- Ans: Activity Log

**16. A company wants to implement Infrastructure as code on the Azure platform. Which of the following can be used for this requirement?**

- Ans: Azure resource manager templates

**17. A development team has a set of Windows 10 machines. Which of the following tools can be used on these machines?**

- Ans: Azure Portal, Powershell and CLI

**18. A development team has a set of Linux-based machines. Which of the following tools can be used on these machines?**

- Ans: Azure Portal, Powershell, CLI

**19. A development team has a set of macOS-based machines. Which of the following tools can be used on these machines?**

- Ans: Azure Portal, Powershell, CLI

**20. Which of the following is a resource that is required by Azure Cloud Shell?**

- Ans: Azure Storage Accounts

**21. A company is planning on using Azure Blueprints. Can you use Azure Blueprints to deploy resource groups to newer subscriptions?**

- Ans: Yes

**22. A company is planning on using Azure Blueprints. Can you use Azure Blueprints to deploy Role assignments to newer subscriptions?**

- Ans: Yes

**23. A company is planning on using Azure Blueprints. Can you use Azure Blueprints to deploy Policy assignments to newer subscriptions?**

- Ans: Yes

**24. A company wants to setup an Azure virtual machine as part of their subscription. They want to ensure that they have a high SLA when it comes to the availability of the virtual machines. Would adding the machines across multiple resource groups help to achieve this requirement?**

- Ans: No

**25. A company wants to setup an Azure virtual machine as part of their subscription. They want to ensure that they have a high SLA when it comes to the availability of the virtual machines. Would adding the machines across an Availability Zones help to achieve this requirement?**

- Ans: Yes

## **DP-900**

### **Section 1: Availability Zones, Regions**

**1. TRUE or FALSE: All Availability Zones in an Azure Region are present in the same data center**

- Ans: False

**2. TRUE or FALSE: Availability Zones in a region are connected through low-latency links**

- Ans: True

**3. Which of these are advantages of Regions?**

- High Availability
- Low Latency
- Global Footprint
- All of the above
- Ans: All of the above

## Section 2: IaaS, PaaS, SaaS

**1. Azure SQL Database is an example of**

- Ans: PaaS

**2. Installing a SQL Server Database manually in Windows Virtual Machine is classified as**

- Ans: IaaS

**3. TRUE or FALSE: In PaaS, Customer is responsible for database availability**

- Ans: False

**4. TRUE or FALSE: In PaaS (example, Azure SQL Database), the Database Administrator is responsible for upgrading OS**

- Ans: False

**5. TRUE or FALSE: When using IaaS (Windows VM to run a database SQL Server), Database Administrator is responsible for upgrading OS**

- Ans: True

**6. You want to set up an SQL Server database in Azure. You want to minimize operational overheads. Which of these Azure databases would you recommend?**

- Ans: Azure SQL Database

**7. Which of these are some of the benefits of using Platform as a Service (Azure SQL Database)?**

- No Hardware Management
- Automatic Backups
- Automatic installation of latest version of OS and database (when needed)
- Ans: All of the above

**8. TRUE or FALSE: You are migrating an on-premises SQL Server database to Azure SQL Database. You can reuse your existing enterprise's license for SQL Server.**

- Ans: True



## Section 3: Data formats and Data stores

**1. You are building an online e-ticketing platform issuing tickets to major sports events. You are using Azure Postgresql as the backend database. What type of processing is your application using?**

- Batch processing
- OLAP
- OLTP
- Ans: OLTP

**2. Your application needs to store unstructured data like images and videos. Which type of data store do you recommend?**

- Ans: Object

**3. Azure Cosmos DB is a**

- Ans: Non relational or NoSQL Database

**4. TRUE OR FALSE : Prefer Relational databases when strong transactional consistency guarantees are needed**

- Ans: True

**5. Your application requires to store JSON document data. Which of these databases would you recommend?**

- Ans: Azure Cosmos DB

**6. A Key-Value store can be used to:**

- Ans: Store user session data

**7. TRUE OR FALSE : Prefer relational databases when database schema is NOT mandatory**

- Ans: False

## Section 4: Relational Databases

**1. Azure SQL Database is an example of**

- Ans: Paas

**2. TRUE or FALSE: Normalization helps in avoiding data duplication across multiple tables**

- Ans: True

**3. TRUE or FALSE: Normalization creates data inconsistency**

- Ans: False

**4. TRUE OR FALSE : Indexes help you to query data efficiently**

- Ans: True

**5. TRUE OR FALSE : In a clustered index, data is stored in a random order**

- Ans: False

**6. TRUE OR FALSE : You can create multiple clustered indices for one table**

- Ans: False

**7. TRUE OR FALSE : You can create multiple non-clustered indices for one table**

- Ans: True

**8. Assuming that course is a table name and user1 is a database user, "GRANT SELECT ON course TO user1" is an example of:**

- Ans: Data Control Language

**9. TRUE or FALSE: Inserting a new row into a table (insert into Course values(.....)) is an example of Data Manipulation Language (DML)**

- Ans: True

**10. "SELECT \* from course WHERE id='DP-900'" is an example of:**

- Ans: Data Query Language

**11. "CREATE DATABASE yourtestdb" is an example of:**



- Ans: Data definition Language

**12. Which of these is a virtual table representing content based on the result set of a query? (You can join multiple tables in the query and/or have calculated columns)**

- Ans: View

**13. \_\_\_\_ allows you to join data from a SQL Server instance using T-SQL with external data such as SQL Server, Oracle, Teradata, MongoDB, Hadoop cluster**

- Ans: Polybase

## **Section 5: NoSQL Databases**

**1. A Key Value store is most commonly used for \_\_\_\_**

- Ans: Store User Session Data

**2. Which of these data stores can be used to store complex relationships between data? (Example : Work Relationship between Employees in an Organization)**

- Ans: Cosmos DB Gremlin API

**3. You want to use a Key Value Datastore to store session data. Which of these Azure services would you recommend?**

- Ans: Azure Cosmos DB Table API

**4. TRUE or FALSE: Azure Cosmos DB Table API supports multi-region writes**

- Ans: True

**5. Your application requires to store JSON document data. Which of these databases would you recommend?**

- Ans: Azure Cosmos DB

**6. Azure Cosmos DB is a**

- Ans: Non Relational or NoSQL Database

**7. Which of these services is suitable for existing Azure Table Storage workloads that require multi-region write capability?**

- Ans: Azure Cosmos Table API

**8. Which of these is a column family database?**

- Ans: Azure Cosmos DB Cassandra

**9. TRUE or FALSE : Azure Cosmos DB Gremlin API Graph database can be queried using Gremlin Language**

- Ans: True

**10. You are building an application to detect money laundering. You want to identify and store relationships between different transactions. Which of these databases would you recommend?**

- Ans: Cosmos DB Gremlin API

## **Section 6: Azure Storage**

**1. TRUE or FALSE: Data stored in Azure Storage Locally redundant storage (LRS) is replicated across multiple availability zones**

- Ans: False

**2. TRUE or FALSE: Data stored in Azure Storage Zone-redundant storage (ZRS) is replicated across multiple availability zones**

- Ans: True

**3. TRUE or FALSE: Data stored in Azure Storage Geo-redundant storage (GRS) is replicated across multiple regions**

- Ans: True

**4. TRUE or FALSE: Data stored in Azure Blob Storage using archive tier has low storage cost and high retrieval cost**

- Ans: True

**5. TRUE or FALSE : Azure Data Lake Storage enables folder level hierarchy**

- Ans: True

**6. You have several virtual machines running on-premises and in the cloud. You want to map a network file share connected to all these machines. Which of these Azure services would you recommend?**

- Ans: Azure Files

**7. You have a requirement to keep your files for period of 5 years. These files will be very rarely accessed. What storage tier would you recommend to keep your costs low?**

- Ans: Archive

**8. TRUE or FALSE : Azure Storage Account supports role based access control at folder and file level only for Azure Data Lake Storage**

- Ans: True

**9. Most optimal data store to store user's profile picture uploaded from an application is**

- Ans: Azure Blob Storage

**10. TRUE or FALSE: Azure Table Storage supports read replica's and multi-region writes**

- Ans: False

## **Section 7: Data Analytics**

**1. A report with details of what happened in the last quarter is an example of:**

- Ans: Descriptive Analysis

**2. \_\_\_\_ provides what action we should take**

- Ans: Prescriptive analytics

**3. Converting speech to text is an example of \_\_\_\_**

- Ans: Cognitive Analytics

**4. Analyzing why car sales are down in the last quarter comes under \_\_\_\_**

- Ans: Diagnostic Analytics

**5. Pie Chart showing number of tickets bought vs seating capacity of a movie theater is example of \_\_\_\_**

- Ans: Descriptive Analytics

**6. Which of these can you use to analyze if a retail company has sufficient stock of products to meet the demand on Black Friday?**

- Ans: Predictive Analytics

**7. In ELT (Extract, Load and Transform):**

- Data is first loaded into the target datastore with minimal processing
- Transformations are done in the target datastore
- We do not use a separate service for transformation
- All of the above
- Ans: All of the above

**8. TRUE OR FALSE: Batch Processing commences when a condition is met**

- Ans: True

**9. Which of the following is TRUE about Batch processing?**

- Data is processed near realtime
- Can not process huge loads of data
- Parallel Processing is not possible
- Batch processing typically has high latency
- Ans: Batch processing typically has high latency

**10. Temperature sensors sending readings every hour is example of \_\_\_\_**

- Ans: Batch Processing

**11. Payment transactions from a POS terminal sent to Event Hubs is an example of \_\_\_\_**

- Ans: Stream Processing

**12. TRUE OR FALSE: When using Azure Data Factory for batch processing, processed data can be stored in relational databases, NoSql databases or in Azure Blob Storage**

- Ans: True

**13. TRUE OR FALSE: Most frequently used data model schema for data analysis (in a data warehouse) is \_\_\_\_**

- Ans: Star Schema

**14. TRUE OR FALSE : STAR schema is de-normalised and easier to query**

- Ans: True

**15. Azure Synapse Analytics supports parallel processing of data using:**

- Ans: Split Processing across multiple compute nodes

**16. Which of these can be used to show impact of a power outage across different states in United States?**

- Ans: Filled Map

**17. TRUE or FALSE : In Azure Data Factory, Linked Service is used to connect to an external source. It contains the details to connect to the external data source.**

- Ans: True

**18. TRUE or FALSE : In Azure Data Factory, Pipeline contains a logical group of activities that can be scheduled**

- Ans: True

**19. True or FALSE : Azure Databricks is a managed service for Apache Spark**

- Ans: True

**20. In Power BI - Paginated Reports are created using:**

- Ans: PowerBI Report Builder

**21. In Power BI - Dashboard can be created using \_\_\_\_.**

- Ans: PowerBI Service

**22. Azure SQL Database creation can be automated using \_\_\_\_.**

- ARM Template
- Azure CLI
- Azure Powershell
- All of the above
- Ans: All of the above

**23. SQL Server, Azure SQL Database, Azure SQL Managed Instance can all be accessed using:**

- Azure Data Studio
- Microsoft SQL Server Management Studio
- Microsoft SQL Server Data
- All of the above
- Ans: All of the above

**24. SQL Server, Azure SQL Database, Postgresql can all be accessed using:\_\_\_**

- Ans: Azure Data Studio

**25. Azure MySql Database and MariaDB can be accessed using:**

- Ans: MySQL Workbench