

**Q1)**

**A company has the requirement to have an automated process in place which would upload logs to an Azure SQL database every week.**

**Reports would then be generated from the SQL database. Which of the following would you use for this requirement?**

- Azure HDInsight
- Data Migration Assistant
- The AZcopy tool
- Azure Data Factory

**Explanation:-**You can use the Azure Data Factory to create a pipeline that can be used to copy data. Below is an excerpt from the Microsoft documentation on the connector for SQL server.

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**Q2)**

**A company has an application running as part of Azure Web Apps. A database is being hosted in a Virtual Network. There is a requirement to ensure that the web app can access a cluster of databases installed on multiple VM in hybrid architect without the need of exposing a public endpoint.**

**You decide to implement Azure Batch Job as part of the solution**

**Does this meet the requirement?**

- Correct
- Incorrect

**Explanation:-**The requirement is connectivity between Web App and SQL database server without the need to exposing public end point.

The solution should be

Virtual Network Rules or Private IP of the database server

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**Q3)**

**A company is planning on moving its on-premise resources to Azure. They have different applications that belong to different departments. Each application has a different requirement for business continuity as given below**

HR Department - The application data needs to be retained for years. From a disaster recovery perspective, the application needs to run from a different Azure region. The Recovery time objective would be 15 minutes

Logistics Department - Here the Service Management team wants to ensure that the application must be able to recover point in time data at a daily granularity level. The Recovery time objective would be 6 hours.

Procurement Department - Here the application must be able to failover to a secondary on-premise data center.

**You have to recommend which service should be used by each department. You have to also ensure that costs are minimized.**

**Which of the following would you use for the Procurement Department?**

- Azure backup only
- Azure site recovery and Azure backup
- Azure site recovery and Azure migrate
- Azure site recovery only

**Explanation:-**You can use the Azure Site Recovery service to ensure that you can failover your application to a secondary site. The below excerpt is from the Microsoft documentation for Azure Site Recovery

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**Q4)**

**A company is planning on moving their on-premise resources to Azure. They have 3 different applications that belong to different departments. Each application has a different requirement for business continuity as given below**

HR Department - The application data needs to be retained for 3 years. From a disaster recovery perspective, the application needs to run from a different Azure region. The Recovery time objective would be 15 minutes

Logistics Department - Here the Service Management team wants to ensure that the application must be able to recover point in time data at a daily granularity level. The Recovery time objective would be 6 hours.

Procurement Department - Here the application must be able to failover to a secondary on-premise data center.

**You have to recommend which service should be used by each department. You have to also ensure that costs are minimized.**

**Which of the following would you use for the Logistics Department?**

- Azure site recovery and azure backup
- Azure site recovery and Azure migrate
- Azure Backup only

**Explanation:-**Use Azure Backup when you want to have backup data at a granular level. This is also mentioned as a different Azure Backup and Azure Site recovery in the Microsoft documentation

- Azure Site Recovery
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**Q5)****Overview**

XYZ is an online training provider. They have several main offices and a couple of branch offices.

**Existing Environment**

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
- The research.XYZ.com forest is only used by the research department
- The company currently has the following Networking Environment in place
- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

#### **Application**

- The company has a web application running on-premise named XYZ-app
- The application is running on Microsoft Internet Information Services
  - The application stores its data on Microsoft SQL Server 2016
  - The servers are all running on Hyper-V
  - The same Hyper-V environment also hosts a staging environment to test all updates to the web application
  - All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### **Planned Changes**

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

**You need to recommend the approach to transferring the data from the on-premise SQL server to the SQL server on Azure.**

**Which of the following would you recommend?**

- Use Azure Backup
- Copy the VHD of the server to Azure BLOB storage
- Use a BACPAC file stored in Azure BLOB storage

**Explanation:-**The ideal approach is to use a BACPAC file. This is also given in the Microsoft documentation.

- Use Azure Site Recovery

**Q6)**

**A company has setup an Azure subscription and an Azure tenant. They have purchased Premium P2 licences.**

**There are different departments that have different requirements for managing identities.**

Department	Requirement
Procurement	<ul style="list-style-type: none"> <li>Get notifications whenever roles are activated</li> <li>Provide just in time access to Azure resources</li> </ul>
Human Resources	<ul style="list-style-type: none"> <li>Ability to conduct access reviews</li> </ul>
Logistics	<ul style="list-style-type: none"> <li>Ensure Applications hosted on the virtual machines can safely access the Azure Key vault service</li> </ul>

**Which of the following would you suggest for the Logistics department?**

- Identity Protection
- Azure AD Connect
- Managed Service Identity

**Explanation:-**This is clearly given in the Microsoft documentation.

- Privileged Identity Protection

**Q7)**

**A company has multiple offices and an Azure subscription. The company wants to implement a data storage solution for their on-premise servers hosted in the various offices. The servers are hosted on Hyper-V.**

The servers must be able to connect to a central storage device by using iSCSI connections

**Which of the following would you look to implement for the offices?**

- Distributed File System Replication
- Azure StorSimple Virtual Array

**Explanation:-**

The StorSimple Virtual Array is a good solution for having hybrid cloud storage. Here on-premise devices can connect using iSCSI.

And then data gets retained to Azure. The Microsoft documentation mentions the following

- Azure File Sync Agent
- Azure Site Recovery Agent

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**Q8)**

**A company named XYZ has just setup an Azure AD tenant. They need to deploy 2 applications to Azure, OnlineQuiz and OnlineForum. Below are the key authentication requirements for the applications**

**OnlineQuiz Application** - Users should be able to authenticate using a personal Microsoft account and multi-factor authentication or using other providers such as facebook.

**OnlineForum Application** - Users should be able to authenticate using either a personal Microsoft account or using the credentials of XYZ. The accounts should be managed via Azure AD

**Which authentication mechanism would you recommend for the Online Forum application?**

- Azure AD B2C
- Azure AD V2.0 endpoint

**Explanation:-**Azure AD v2.0 endpoint is best suited for this, since it supports both Work and personal accounts as shown below

- Azure AD B2B
- Azure AD V1.0 endpoint

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**Q9)**

**A company currently has an on-premise infrastructure that consists of**

An Active directory domain named XYZ.com  
Active Directory Federation services  
Application Proxy servers for external connection

**The company has recently setup an Azure AD tenant. They have also setup Azure AD Connect for the synchronization of users from the on-premise AD to Azure AD. They have the following additional requirements**

Ability to monitor the solutions that integrate with Azure AD  
Identify any potential issues in AD FS  
Identify any directory synchronization issues

**You need to identify the right monitoring solution for each type of server**

**Which of the following would you use to monitor the AD FS servers?**

- Azure Security Center
- Azure AD Connect Health

**Explanation:-**Azure AD Connect Health has the ability to monitor AD FS servers as well. If you see the Microsoft documentation, you can clearly see the option present.

- Active Directory Federation Services Health Check solution in Azure Log Analytics
- Active Directory Health Check solution in Azure Log Analytics

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**Q10)**

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**Application**

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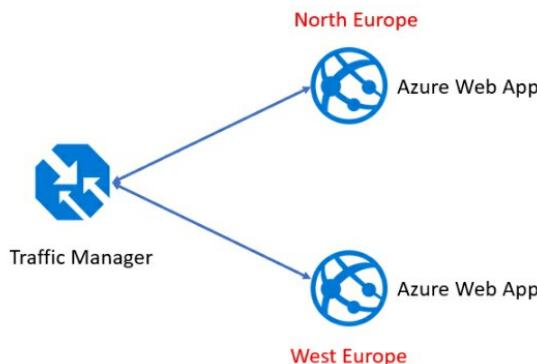
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  - Database downtime must be minimized when the database is being migrated onto Azure
  - Database backup's must be maintained for a period of 5 years
- The following requirements need to be met in terms of Security
- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials
  - Any administrative access to Azure must be complemented by multi-factor authentication

**The following architecture is being recommended for the Web application**



**Would this architecture require a manual configuration if an Azure region fails?**

Incorrect

**Explanation:**- Here you can use the priority traffic routing method which would automatically failover the Web application if it detects a failure in the primary region. The Microsoft documentation mentions the following

Correct

#### **Q11)**

##### **Overview**

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... Azure AD private and a public...

· Directory Synchronization must be established between Azure AD and the quiz. XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

· When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment

· Database downtime must be minimized when the database is being migrated onto Azure

· Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

· Administrators should be able to authenticate to Azure by using the quiz. XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

#### What is the minimum number of Azure tenants that need to be setup?

2

1

**Explanation:-**Since there is only one forest that needs to be synced with Azure AD, one can opt for having one Azure AD tenant. This is the simplest form of connectivity as shown below

3

Zero

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#### Q12)

**A company has created 2 virtual networks, one in the Central US and the other in the East US region. There is a requirement to ensure that Virtual Machines on the Virtual Networks are able to communicate with each other using their private IP addresses.**

**You also need to ensure low latency access between the Virtual machines. You also need to ensure that the solution is cost effective.**

**You decide to implement Virtual Network Peering.**

**Does this fulfil the requirement?**

Correct

**Explanation:-**You can implement Virtual Network Peering for this requirement. Below is what is mentioned in the Microsoft documentation.

Incorrect

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#### Q13)

**A company is planning on deploying an application onto Azure. The application will be based on the .Net core programming language. The application would be hosted using Azure Web apps. Below is part of the various requirements for the application.**

**Gives the ability for the testing team to view the different components of an application and see the calls being made between the different application components**

**Helps business analyse how many users actually return to the application.**

**Ensuring IT administrators get alerts based on critical conditions being met in the application**

**Which of the following service would be best suited for fulfilling the requirement of**

**“Gives the ability for the testing team to view the different components of an application and see the calls being made between the different application components”**

Azure Service Health

Azure Policies

Application Insights

**Explanation:-**This feature is part of the Application Insights tool. An example of this is given in the Microsoft documentation

Azure Advisor

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#### Q14)

**A company has an Azure subscription. The company has launched virtual machines that uses unmanaged standard hard disk drives. You need to develop a strategy for the virtual machines that would ensure that the virtual machines would be made available in the event of a region failure.**

**The recovery time objective can be up to 5 days. Costs need to be minimized in the implementation.**

**Which of the following replication strategy would you incorporate for the storage account?**

Locally redundant storage (LRS)

Zone-redundant storage (ZRS)

Read-access geo-redundant storage (RA-GRS)

Geo-redundant storage (GRS)

**Explanation:-**Since the disks need to be available in the event of a region failure you need to choose Geo-redundant storage. The Microsoft documentation mentions the following

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#### Q15)

**A company has an Azure storage account. The storage account needs to be configured in such a way that it is only accessible from one specific Azure Virtual Network. You have to ensure that the storage account is not accessible from the Internet.**

**Which of the following would you use to implement this requirement?**

Add a network security group

- Create a VNET service endpoint

**Explanation:-**

The Microsoft documentation mentions the following

Virtual Network (VNet) service endpoints extend your virtual network private address space and the identity of your VNet to the Azure services, over a direct connection. Endpoints allow you to secure your critical Azure service resources to only your virtual networks. Traffic from your VNet to the Azure service always remains on the Microsoft Azure backbone network.

- Deploy Azure CDN
- Activate the Secure transfer required option

**Q16)**

**A company has developed a web service that is made available on a virtual machine deployed to a subnet in the Virtual network XYZ-network.**

**An API Management service has been deployed, which will provide access to the API service hosted on the Virtual Machine.**

**Consultant companies must be able to connect to the API over the Internet.**

**Below is the configuration of the API management gateway instance.**

LOCATION	VIRTUAL NETWORK	SUBNET
Central US	XYZ -network	default

**Based on the configuration, would a VPN gateway be required for consultant access ?**

- Correct
- Incorrect

**Explanation:-**An example of this configuration is given in the Microsoft documentation. By choosing the External option, the API management gateway instance would also be available over the Internet. Hence a VPN gateway would not be required for access for the consultants.

**Q17)**

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**Planned Changes**

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  - Database backup's must be maintained for a period of 5 years
- The following requirements need to be met in terms of Security
- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials
  - Any administrative access to Azure must be complemented by multi-factor authentication

### You need to decide on whether Azure storage is required for the various requirements of the case study

#### Would you need to provision an Azure storage account for database metric monitoring?

- Incorrect  
 Correct

**Explanation:**-The case study mentions that we need to have the database metrics in place for further analysis. So, we need to persist the logs and metrics for the database. One way as mentioned below is to use Azure Storage accounts.

#### Q18)

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##### Planned Changes

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The following requirements need to be met in terms of the database

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· Database downtime must be minimized when the database is being migrated onto Azure

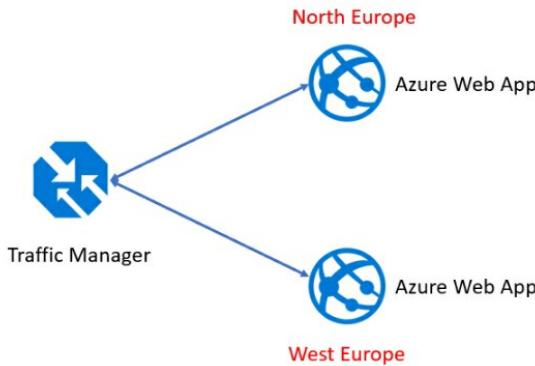
· Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

The following architecture is being recommended for the Web application



## Would this architecture support redundancy for the web application?

- Correct

**Explanation:**-Here you can use the priority traffic routing method which would automatically failover the Web application if it detects a failure in the primary region. The Microsoft documentation mentions the following

- Incorrect

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### Q19)

**A company needs to run an application that would be processing thousands of images at the same time. They need to have an ideal compute solution designed in Azure to handle the high scale processing of the images.**

You decide to deploy an HPC Pack to Azure.

Does this meet the requirement?

- Incorrect  
 Correct

**Explanation:**-this can be done with the help of deploying HPC Pack to Azure. The Microsoft documentation mentions the following

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### Q20)

**A company has just setup an Azure subscription. They have offices located in Mumbai and Hyderabad.**

**They are now planning their network connectivity strategy. They have the following networks defined in Azure**

Virtual Network Name	Address space	Region
XYZ -network1	10.0.1.0/24	North Europe
XYZ -network2	10.0.2.0/24	West Europe

The networks have the following subnets defined

Subnet Name	Virtual Network
SubnetA	XYZ -network1
SubnetB	XYZ -network2

**The company has the following requirements when it comes to connectivity**

The Virtual Machines hosted in SubnetA must only be accessible to clients located in the Mumbai office

IT administrators working on dedicated workstations must have access to the Virtual Machines in SubnetA over the Internet on a specific TCP/IP management port

The Azure Virtual Machines hosted in the XYZ-network1 must be able to communicate on all ports to Azure Virtual Machines hosted in XYZ-network2

**Which of the following architecture would you recommend to ensure VM in SubnetA can be accessible to client located at Mumbai Office?**

- Network Security Groups  
 Site-to-Site VPN

**Explanation:**-A site-to-site VPN connection can be used to connect on-premise infrastructure onto Azure. Below is what is mentioned in the Microsoft documentation

- Virtual Network Peering  
 A new Virtual Network

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### Q21)

**A company has setup an Azure subscription and an Azure tenant. They have purchased Premium P2 licences. There are different departments that have different requirements for managing identities.**

Department	Requirement
Procurement	<ul style="list-style-type: none"><li>Get notifications whenever roles are activated</li><li>Provide just in time access to Azure resources</li></ul>
Human Resources	<ul style="list-style-type: none"><li>Ability to conduct access reviews</li></ul>
Logistics	<ul style="list-style-type: none"><li>Ensure Applications hosted on the virtual machines can safely access the Azure Key vault service</li></ul>

**Which of the following would you suggest for the Human Resource department?**

- Privileged Identity Management

**Explanation:**-This is clearly given in the Microsoft documentation wherein the Privileged Identity Management feature would fulfil this requirement

- Azure AD Connect  
 Managed Service Identity  
 Identity Protection

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### Q22)

**A company is planning on deploying an application onto Azure. The application will be based on the .Net core programming language. The application would be hosted using Azure Web apps. Below is part of the various requirements for the application.**

Gives the ability for the testing team to view the different components of an application and see the calls being made between the different application components

Helps business analyse how many users actually return to the application

Ensuring IT administrators get alerts based on critical conditions being met in the application

**Which of the following service would be best suited for fulfilling the requirement of**

**"Helps business analyse how many users actually return to the application"**

- Azure Service Health

- Application insight

**Explanation:-**This feature is part of the Application Insights tool. An example of this is given in the Microsoft documentation

- Azure Policies

- Azure Advisor

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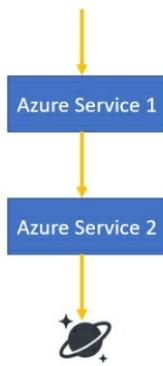
**Q23)**

**A company needs to design an architecture that would meet the below requirements**

Capture data with regards to creation of users and assignment of roles in their Azure account

All captured data must be sent to a CosmosDB account

**You have to complete the below architecture diagram to fulfil the above requirements.**



**Which of the following would you suggest for Azure Service 2?**

- Azure Event Hubs

- Azure Functions

**Explanation:-**Azure Functions is an ideal consumer for this requirement. The Azure Function can be programmed to receive the event data and then send it across to CosmosDB.

- Azure Notification Hub

- Azure Log Analytics

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**Q24)**

**A company currently has an on-premise infrastructure that consists of**

An Active directory domain named XYZ.com

Active Directory Federation services

Application Proxy servers for external connection

**The company has recently setup an Azure AD tenant. They have also setup Azure AD Connect for the synchronization of users from the on-premise AD to Azure AD. They have the following additional requirements**

Ability to monitor the solutions that integrate with Azure AD

Identify any potential issues in AD FS

Identify any directory synchronization issues

**You need to identify the right monitoring solution for each type of server**

**Which of the following would you use to monitor the web application proxy servers?**

- Azure Security Center

- Azure AD Connect Health

**Explanation:-**Azure AD Connect Health can also be used to monitor web application proxy servers as well.

This is given in the Microsoft documentation

- Active Directory Health Check solution in Azure Log Analytics

- Active Directory Federation Services Health Check solution in Azure Log Analytics

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**Q25)**

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#### **Planned Changes**

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials
- Any administrative access to Azure must be complemented by multi-factor authentication

#### **What is the minimum number of custom domains to add to Azure AD?**

- 2  
 1

**Explanation:**-Since users need to authenticate via the UPN's associated with the quiz.XYZ.com forest, you just need to create one custom domain in Azure AD. That custom domain will be quiz.XYZ.com.

- Zero  
 3

#### **Q26)**

**A company is setting up a data storage solution for their on-premise location. They have to ensure that data is automatically replicated to Azure.**

**They decide to include using Azure Table storage as part of their storage solution.**

**Would this fulfill the requirement?**

- Incorrect

**Explanation:**-This is table level storage available in Azure. This is not the ideal solution for replicating data between on-premise and Azure.

- Correct

#### **Q27)**

##### **Overview**

XYZ is an online training provider. They have several main offices and a couple of branch offices.

##### **Existing Environment**

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
- The research.XYZ.com forest is only used by the research department

The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

#### **Application**

The company has a web application running on-premise named XYZ-app

- The application is running on Microsoft Internet Information Services
- The application stores its data on Microsoft SQL Server 2016
- The servers are all running on Hyper-V

- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### Planned Changes

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

#### Which of the following should be recommended for the database retention period?

- Configure Azure backup for the database
- Long term retention for the database

**Explanation:**-You can use the long-term retention feature as mentioned in the Microsoft documentation below

- Use Azure Site Recovery for the database
- Configure geo-replication for the database

---

#### Q28)

**A company has created 2 virtual networks, one in the Central US and the other in the East US region.**

**There is a requirement to ensure that Virtual Machines on the Virtual Networks are able to communicate with each other using their private IP addresses.**

**You also need to ensure low latency access between the Virtual machines. You also need to ensure that the solution is cost effective.**

**You decide to implement an Custom route table**

**Does this fulfil the requirement?**

- Incorrect

**Explanation:**-In the question there is no special mention on routing traffic. Hence custom route tables don't need to be part of the implementation.

- Correct

---

#### Q29)

**A company has deployed an API management instance. They need a solution to protect the API from a DDoS (Distributed denial of service) attack.**

**Which of the following could be recommended for this requirement?**

- Network Security Group
- OAuth2
- Quotas
- Rate Limiting

**Explanation:**-You can protect the number of calls to the API by using rate limiting. Below is what is mentioned in the Microsoft documentation

---

#### Q30)

##### Overview

XYZ is an online training provider. They have several main offices and a couple of branch offices.

##### Existing Environment

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
- The research.XYZ.com forest is only used by the research department

The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

##### Application

The company has a web application running on-premise named XYZ-app

- The application is running on Microsoft Internet Information Services
- The application stores its data on Microsoft SQL Server 2016
- The servers are all running on Hyper-V
- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### Planned Changes

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment

- Database downtime must be minimized when the database is being migrated onto Azure

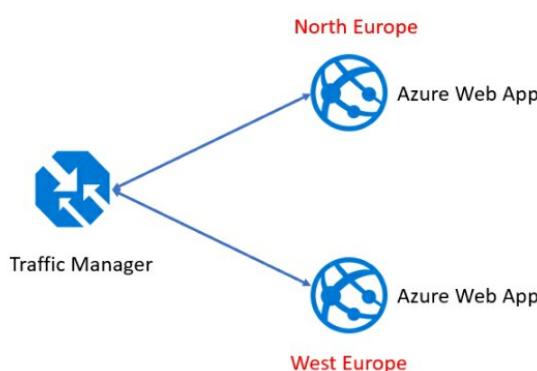
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

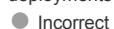
**The following architecture is being recommended for the Web application**



**Would this architecture support autoscaling for the web application?**



**Explanation:-**Azure App Service enables you to build and host web apps, mobile back ends, and RESTful APIs in the programming language of your choice without managing infrastructure. It offers auto-scaling and high availability, supports both Windows and Linux, and enables automated deployments from GitHub, Azure DevOps, or any Git repo.



**Q31)**

**A company has created 2 virtual networks, one in the Central US and the other in the East US region. There is a requirement to ensure that Virtual Machines on the Virtual Networks are able to communicate with each other using their private IP addresses.**

**You also need to ensure low latency access between the Virtual machines. You also need to ensure that the solution is cost-effective.**

**You decide to implement an Express Route connection**

**Does this fulfil the requirement?**



**Explanation:-**This type of connection is generally used to extend on-premise infrastructure to Azure. Below is what is mentioned in the Microsoft documentation

**Q32)**

**A company has setup an Azure subscription and an Azure tenant. They have purchased Premium P2 licences.**

**There are different departments that have different requirements for managing identities.**

Department	Requirement
Procurement	<ul style="list-style-type: none"> <li>Get notifications whenever roles are activated</li> <li>Provide just in time access to Azure resources</li> </ul>

Human Resources	<ul style="list-style-type: none"> <li>Ability to conduct access reviews</li> </ul>
Logistics	<ul style="list-style-type: none"> <li>Ensure Applications hosted on the virtual machines can safely access the Azure Key vault service</li> </ul>

### Which of the following would you suggest for the Logistics department?

- Managed Service Identity
  - Privileged Identity Management
  - Identity Protection
  - Azure AD Connect
- 

### Q33)

#### Overview

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- The research.XYZ.com forest is only used by the research department

The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

#### Application

The company has a web application running on-premise named XYZ-app

- The application is running on Microsoft Internet Information Services
- The application stores its data on Microsoft SQL Server 2016
- The servers are all running on Hyper-V
- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### Planned Changes

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials
- Any administrative access to Azure must be complemented by multi-factor authentication

### What is the minimum number of conditional access policies that need to be created?

- Zero

**Explanation:-** There is a baseline policy that ensures that Multi-factor authentication is present for administrative accounts as shown below

- 2
  - 1
  - 3
- 

### Q34)

**An application needs to be deployed onto Azure. This application will be hosted on a set of Virtual Machines.**

**The below set of rules need to apply when it comes to diverting traffic for users**

Users navigating to [http://XYZ.com/video/\\*](http://XYZ.com/video/*) need to be directed to one set of virtual machines

Users navigating to [http://XYZ.com/images/\\*](http://XYZ.com/images/*) need to be directed to another set of virtual machines

**You need to setup the correct appliance which could be used to fulfil these requirements. Which of the following would you implement?**

- Store Accounts
- Application Gateway

**Explanation:-** You can use the URL routing feature of the application gateway as shown below

- Traffic Manager
  - Virtual Private Gateway
- 

### Q35)

**A company has deployed web applications onto Virtual Machines in 2 separate AZ's. They want to load balance traffic at Layer**

7.

**They also want to protect web application from SQL injection attacks.**

**Which of the following service would you use for this requirement?**

- Azure Network Watcher
- Azure Traffic Manager
- Azure Load Balancer
- Azure Application Gateway

**Explanation:-**The ideal solution for this is the Azure Application Gateway. This can be used to route traffic at Layer 7. This is also mentioned in the Microsoft documentation as mentioned below

---

**Q36)**

**You need to decide on whether Azure storage is required for the various requirements of the case study**

**Overview**

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**Existing Environment**

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
- The research.XYZ.com forest is only used by the research department

The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

**Application**

The company has a web application running on-premise named XYZ-app

- The application is running on Microsoft Internet Information Services
- The application stores its data on Microsoft SQL Server 2016
- The servers are all running on Hyper-V
- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

**Planned Changes**

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

**Would you need to provision an Azure storage account for Web site content?**

- Correct
- Incorrect

**Explanation:-**When you choose an App Service plan for an Azure Web app, it normally comes along with storage. An example is given below

---

**Q37)**

**A company has multiple offices and an Azure subscription. The company wants to implement a data storage solution for their on-premise servers hosted in the various offices. The servers are hosted on Hyper-V.**

The servers must be able to connect to a central storage device by using iSCSI connections

Data that is stored in the central device needs to be uploaded to Azure automatically

Minimize the maintenance of the solution

**Based on the tool being used, which of the following would you plan to setup in Azure?**

- Azure File Share
- Azure File Sync

- Azure Site Recovery Vault
- Azure Storage Account

**Explanation:-**

When you look at the pre-requisites for the setup of StorSimple Virtual Array, you can see that you need to also have a storage account in place.

This is also given in the Microsoft documentation

---

**Q38)**

**A company has just setup an Azure subscription. They have offices located in Mumbai and Hyderabad.**

**They are now planning their network connectivity strategy. They have the following networks defined in Azure**

Virtual Network Name	Address space	Region
XYZ -network1	10.0.1.0/24	North Europe
XYZ -network2	10.0.2.0/24	West Europe

Subnet Name	Virtual Network
SubnetA	XYZ -network1
SubnetB	XYZ -network2

**The company has the following requirements when it comes to connectivity**

The Virtual Machines hosted in SubnetA must only be accessible to clients located in the Mumbai office

IT administrators working on dedicated workstations must have access to the Virtual Machines in SubnetA over the Internet on a specific TCP/IP management port

The Azure Virtual Machines hosted in the XYZ-network1 must be able to communicate on all ports to Azure Virtual Machines hosted in XYZ-network2

**Which of the following would you use for the purpose?**

The Azure Virtual Machines hosted in the XYZ-network2 must be able to communicate on all ports to Azure Virtual Machines hosted in XYZ-network1.

- Network Security Groups
- Virtual Network Peering

**Explanation:-**You can connect Virtual Networks together using Virtual Network Peering across regions. Below is what is mentioned in the Microsoft documentation

- Site-to-Site VPN
  - A new Virtual network
- 

**Q39)**

**A company is planning on moving their on-premise resources to Azure. They have 3 different applications that belong to different departments. Each application has a different requirement for business continuity as given below**

HR Department - The application data needs to be retained for 3 years. From a disaster recovery perspective, the application needs to run from a different Azure region. The Recovery time objective would be 15 minutes

Logistics Department - Here the Service Management team wants to ensure that the application must be able to recover point in time data at a daily granularity level. The Recovery time objective would be 6 hours.

Procurement Department - Here the application must be able to failover to a secondary on-premise data center.

**You have to recommend which service should be used by each department. You have to also ensure that costs are minimized.**

**Which of the following would you use for the HR Department?**

- Azure site recovery only
- Azure site recovery and Azure backup

**Explanation:-**You will need the Azure backup service for long term retention of data. The below excerpt is from the Microsoft documentation on the retention of data in the Azure backup service

- Azure backup only
  - Azure site recovery and Azure migrate
- 

**Q40)**

**Overview**

XYZ is an online training provider. They have several main offices and a couple of branch offices.

**Existing Environment**

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
- The research.XYZ.com forest is only used by the research department

The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
- The main head office contains the domain controller of the research.XYZ.com forest
- All of the offices have high speed internet connections

**Application**

The company has a web application running on-premise named XYZ-app

- The application is running on Microsoft Internet Information Services

- The application stores its data on Microsoft SQL Server 2016
- The servers are all running on Hyper-V
- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### **Planned Changes**

- The company wants to migrate its workloads to Azure.
- They also want to create a hybrid identity model along with a Microsoft Office 365 deployment
- The research department will continue to use the infrastructure in the on-premise environment.

Following are the key requirements for the migration to Azure

- The Web application "XYZ -app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

Any administrative access to Azure must be complemented by multi-factor authentication

#### **You need to decide on whether Azure storage is required for the various requirements of the case study**

#### **Would you need to provision an Azure storage account for the SQL Server database migration?**



Correct

**Explanation:**-You would need a storage account to store the BACPAC file which will be needed for the SQL database import. The BACPAC file will need to be stored in Azure BLOB storage



Incorrect

#### **Q41)**

##### **Overview**

XYZ is an online training provider. They have several main offices and a couple of branch offices.

##### **Existing Environment**

The company currently has the following Active Directory Environment in place

- Two Active Directory forests - One is quiz.XYZ.com and the other is research.XYZ.com
- Currently there is no trust relationship between the forests
- The quiz.XYZ.com is the production forest that hosts all the identities required for internal user and computer authentication.
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The company currently has the following Networking Environment in place

- The offices currently contain at least one domain controller from the quiz.XYZ.com forest.
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- All of the offices have high speed internet connections

##### **Application**

The company has a web application running on-premise named XYZ -app

- The application is running on Microsoft Internet Information Services
- The application stores its data on Microsoft SQL Server 2016
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- The same Hyper-V environment also hosts a staging environment to test all updates to the web application
- All Microsoft based licenses have been purchased via a Microsoft Enterprise Agreement that includes Software Assurance

#### **Planned Changes**

- The company wants to migrate its workloads to Azure.
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The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials

**A strategy needs to be recommended for the Web application – “XYZ-app”. The loads on the application would be unpredictable.**

**It needs to be ensured that the application can sustain itself at high workloads.**

**Also, it needs to be ensured that costs are being minimized at lower workloads. Which of the following would you recommend?**

- Deploy Virtual machine scale sets to scale out based on the CPU threshold
- Deploy Virtual machine scale sets to scale out based on the Memory threshold
- Configure the Scale Out settings for the web application
- Configure the Scale up settings for the web application

---

**Q42)**

**A company has just setup an Azure subscription. They have offices located in Mumbai and Hyderabad.**

**They are now planning their network connectivity strategy. They have the following networks defined in Azure**

Virtual Network Name	Address space	Region
XYZ -network1	10.0.1.0/24	North Europe
XYZ -network2	10.0.2.0/24	West Europe

The networks have the following subnets defined

Subnet Name	Virtual Network
SubnetA	XYZ -network1
SubnetB	XYZ -network2

**The company has the following requirements when it comes to connectivity**

The Virtual Machines hosted in SubnetA must only be accessible to clients located in the Mumbai office

IT administrators working on dedicated workstations must have access to the Virtual Machines in SubnetA over the Internet on a specific TCP/IP management port

The Azure Virtual Machines hosted in the XYZ-network1 must be able to communicate on all ports to Azure Virtual Machines hosted in XYZ-network2

**Which of the following would you use to fulfill the requirement of Point No. 2 aforementioned?**

- Site-to-Site VPN
- Network Security Group

**Explanation:-**You can use Network Security Groups to define the traffic flow rules into and out of Virtual Machines. Below is what is mentioned in the Microsoft documentation

- Virtual Network Peering
- A new Virtual Network

---

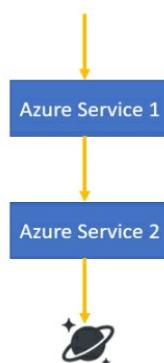
**Q43)**

**A company needs to design an architecture that would meet the below requirements**

Capture data with regards to creation of users and assignment of roles in their Azure account

All captured data must be sent to a CosmosDB account

**You have to complete the below architecture diagram to fulfil the above requirements.**



**Which of the following would you suggest for Azure Service 1?**

- Azure Log Analytics
- Azure Notification Hub
- Azure Event Hub
- Azure Event Grid

**Explanation:-**The Event Grid service is ideal for capturing different sort of events in Azure. So, since you need to capture events pertaining to the creation of users and assignment of roles, you can use the Event Grid service. The diagram representation of the Azure Event Grid service is given below.

---

**Q44)**

**A company currently has around 100 Virtual Machines running on their on-premise infrastructure. There is a plan to move the Virtual machines to Azure. The Virtual machines are running on a VMWare environment. The Virtual machines run different types of workloads.**

**You need to prepare a report on the capacity requirement for the Virtual Machines that need to be created in Azure for the migration.**

**Which of the following would you use for this purpose?**

- Azure Cost Management
- Azure Migrate

**Explanation:-**The Azure Migrate tool is the perfect tool for this scenario. The Microsoft documentation mentions the following

- Azure Site Recovery
- Azure Advisor

---

**Q45)**

**A company is setting up a data storage solution for their on-premise location. They have to ensure that data is automatically replicated to Azure.**

**They decide to include using Azure BLOB storage as part of their storage solution. Would this fulfill the requirement?**

- Incorrect

**Explanation:-**This is object storage available in Azure. You can use the AzCopy tool to copy data, but this is not the ideal solution for replicating data between on-premise and Azure.

- Correct

---

**Q46)**

#### **Overview**

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#### **Application**

The company has a web application running on-premise named XYZ-app

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Following are the key requirements for the migration to Azure

- The Web application "XYZ-app" needs to be migrated to Azure
- Existing licenses should be used wherever possible to minimize on costs
- Users need to always authenticate using their quiz.XYZ.com UPN identity
- All new deployments to Azure must be redundant in the case of an Azure region failure
- PaaS deployments are preferred wherever possible
- Directory Synchronization must be established between Azure AD and the quiz.XYZ.com forest. This synchronization must not be affected by a link failure between Azure and the on-premise network.

The following requirements need to be met in terms of the database

- When the database is migrated to Azure, it needs to be ensured that metrics are recorded for the database. The database administrators should be able to analyse the metrics for suggesting any further improvements to the database environment
- Database downtime must be minimized when the database is being migrated onto Azure
- Database backup's must be maintained for a period of 5 years

The following requirements need to be met in terms of Security

- Administrators should be able to authenticate to Azure by using the quiz.XYZ.com credentials
- Any administrative access to Azure must be complemented by multi-factor authentication

**You need to recommend how to setup the data store for hosting the SQL database in Azure.**

**Which of the following would you recommend?**

- A Virtual machine running a SQL server
- A vCore-based Azure SQL Database

**Explanation:-**Since the company already has existing Microsoft licences with software assurance, they can opt for a hybrid model in which they can

benefit from huge discounts. This is also given in the Microsoft documentation.

- A fixed size DTU based Azure SQL database
  - An Azure SQL database elastic pool
- 

**Q47)**

**A company is setting up a data storage solution for their on-premise location. They have to ensure that data is automatically replicated to Azure.**

**They decide to include using Azure StorSimple as part of their storage solution.**

**Would this fulfil the requirement?**

- Correct

**Explanation:-**Using StorSimple is an ideal solution for this case. This is a hybrid cloud solution. The Microsoft documentation mentions the following on the usage of StorSimple

- Incorrect
- 

**Q48)**

**A company has an Azure subscription. The company has launched virtual machines that uses unmanaged standard hard disk drives. You need to develop a strategy for the virtual machines that would ensure that the virtual machines would be made available in the event of a region failure. The recovery time objective can be up to 5 days. Costs need to be minimized in the implementation.**

**Which of the following would you use to recreate the virtual machine in case of a machine failure?**

- Azure StoreSimple
- Azure Policy
- Azure Site Recovery
- Azure resource manager templates

**Explanation:-**Since we need to minimize costs and the RTO is quite long, we can just use Resource Manager to recreate the virtual machine.

---

**Q49)**

**A company has deployed web applications onto Virtual Machines in 2 separate regions. They want to load balance traffic at Layer 7.**

**They also want to protect the web application from SQL injection attacks.**

**Which of the following feature would you use for this requirement?**

- Web Application Firewall

**Explanation:-**This is clearly mentioned in the Microsoft documentation

- URL Routing
  - Endpoint Monitoring
  - Packet Analysis
- 

**Q50)**

**A company currently has an on-premise infrastructure that consists of**

An Active directory domain named XYZ.com  
Active Directory Federation services  
Application Proxy servers for external connection

**The company has recently setup an Azure AD tenant. They have also setup Azure AD Connect for the synchronization of users from the on-premise AD to Azure AD. They have the following additional requirements**

Ability to monitor the solutions that integrate with Azure AD  
Identify any potential issues in AD FS  
Identify any directory synchronization issues

**You need to identify the right monitoring solution for each type of server**

**Which of the following would you use to monitor the AD Connect Servers?**

- Azure AD Connect Health

**Explanation:-**Azure AD Connect Health has the ability to monitor all AD Connect Servers and check for any synchronization issues. If you see the Microsoft documentation, you can clearly see the option present.

- Azure Security Center
  - Active Directory Health Check solution in Azure Log Analytics
  - Active Directory Federation Services Health Check solution in Azure Log Analytics
- 

**Q51)**

**A company is planning on deploying an application onto Azure. The application will be based on the .Net core programming language.**

**The application would be hosted using Azure Web apps. Below is part of the various requirements for the application.**

Gives the ability for the testing team to view the different components of an application and see the calls being made between the different application components

Helps business analyse how many users actually return to the application

Ensuring IT administrators get alerts based on critical conditions being met in the application

Which of the following service would be best suited for fulfilling the requirement of  
"Ensuring IT administrators get alerts based on critical conditions being met in the application"

- Azure Advisor
- Azure Monitor

**Explanation:-**This is a feature of Azure Monitor wherein you can use the Alerts feature. This is also mentioned in the Microsoft documentation

- Application Insight
- Azure Policies

#### Q52)

A company has developed a web service that is made available on a virtual machine deployed to a subnet in the Virtual network XYZ-network.

An API Management service has been deployed, which will provide access to the API service hosted on the Virtual Machine.

Consultant companies must be able to connect to the API over the Internet.

Below is the configuration of the API management gateway instance

The screenshot shows the 'Management API' blade of the Azure API Management service. On the left, there's a navigation menu with 'Management API' at the top, followed by 'Security' (with 'Identities' selected), 'Virtual network' (with 'External' selected), 'LOCATION', 'VIRTUAL NETWORK', and 'SUBNET'. The 'Virtual network' section shows 'Central US' as the location, 'XYZ -network' as the virtual network, and 'default' as the subnet. On the right, there's a detailed configuration pane for 'Virtual network' settings, including sections for 'Properties', 'External cache (preview)', 'Scale and pricing', 'Virtual network' (which is highlighted in blue), and 'Protocol settings'.

Based on the configuration, would the API be available to the consultants over the Internet?

- Incorrect
- Correct

**Explanation:-**An example of this configuration is given in the Microsoft documentation. By choosing the External option, the API management gateway instance would also be available over the Internet

#### Q53)

A company needs to run an application that would be processing thousands of images at the same time.

They need to have an ideal compute solution designed in Azure to handle the high scale processing of the images.

You decide to implement Azure Web Apps as part of the solution

Does this meet the requirement?

- Correct
- Incorrect

**Explanation:-**The Azure Web App service is used to run primarily web applications and cannot be used for high compute intensive parallel processing jobs.

#### Q54)

A company named XYZ has just setup an Azure AD tenant. They need to deploy 2 applications to Azure, OnlineQuiz and OnlineForum.

Below are the key authentication requirements for the applications

\***OnlineQuiz Application - Users should be able to authenticate using a personal Microsoft account and multi-factor authentication or using other providers such as facebook.**

\***OnlineForum Application - Users should be able to authenticate using either a personal Microsoft account or using the credentials of XYZ . The accounts should be managed via Azure AD**

Which authentication mechanism would you recommend for the OnlineQuiz application?

- Azure AD B2B
- Azure AD B2C

**Explanation:-**

If you look at the authentication providers possible with Azure B2C, you can see that you can use a Microsoft account. This is provided in the Microsoft documentation.

## Identity providers

In your applications, you want to enable users to sign in with different identity providers. An identity provider creates

In your applications, you may want to enable users to sign in with different identity providers. An *identity provider* creates, maintains, and manages identity information while providing authentication services to applications. You can add identity providers that are supported by Azure AD B2C using the Azure portal.

You typically use only one identity provider in your application, but you have the option to add more. To configure an identity provider in your Azure AD B2C tenant, you first create an application on the identity provider developer site, and then you record the application identifier or client identifier and the password or client secret from the identity provider application that you create. This identifier and password are then used to configure your application.

The following articles describe the steps to add some of the common identity providers to user flows:

- Amazon
- Facebook
- Microsoft account



If also supports Multi-factor authentication as shown below

## Enable multi-factor authentication in Azure Active Directory B2C



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Azure Active Directory (Azure AD) B2C integrates directly with [Azure Multi-Factor Authentication](#) so that you can add a second layer of security to sign-up and sign-in experiences in your applications. You enable multi-factor authentication without writing a single line of code. If you already created sign up and sign-in user flows, you can still enable multi-factor authentication.

- Azure AD V2.0 endpoint
- Azure AD V1.0 endpoint

**Q55)**

**A company has developed a web service that is made available on a virtual machine deployed to a subnet in the Virtual network XYZ-network.**

**An API Management service has been deployed, which will provide access to the API service hosted on the Virtual Machine.**

**Consultant companies must be able to connect to the API over the Internet.**

**Below is the configuration of the API management gateway instance**

The screenshot shows the 'Management API' blade of the Azure API Management portal. On the left, there's a navigation menu with 'Security' selected under 'Identities'. The main area displays a summary card for virtual network connectivity, stating 'Securely access resources available in or through your Azure VNet. Learn more.' It notes that changes can take from 15 to 45 minutes to apply and advises ensuring required ports are unblocked. Below this, there are tabs for 'Virtual network' (set to 'External'), 'LOCATION', 'VIRTUAL NETWORK', and 'SUBNET'. The 'LOCATION' is set to 'Central US', 'VIRTUAL NETWORK' is 'XYZ -network', and 'SUBNET' is 'default'. A callout box highlights the 'External' tab under 'Virtual network'.

**Based on the configuration, would the gateway be able to access the data from the Virtual Machine?**

- Incorrect
- Correct

**Explanation:-**Correct, since the gateway is attached to the Virtual Network, it would have access to the Virtual Network. An example of this is given in the Microsoft documentation

**Q56)**

**A team has a .Net application that needs to run on a Virtual machine.**

**The application on the Virtual machine must authenticate using the same Azure AD Identity.**

**Which of the following would be done to provision the Azure AD Identity?**

- Create a system-assigned Managed Service Identity

**Explanation:-**

Here we can simply use a system assigned Managed Service Identity. This can be done for the Virtual machine.

The Microsoft documentation mentions the following

- Register a web application in Azure AD
- Register an Enterprise application in Azure AD
- Create a user-assigned Managed Service Identity

**Q57)**

**A team has a .Net application that needs to run on a Virtual machine.**

**The application on the Virtual machine must authenticate using the same Azure AD Identity.**

**In order to generate a request token, which of the following would be used?**

- Azure AD v1.0 endpoint
- Azure AD v2.0 endpoint
- OAuth2 endpoint
- Azure instance Metadata service identity

**Explanation:-**To generate the token, you have to use the Azure Instance Metadata Service Identity. The workflow is also given in the Microsoft documentation.

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**Q58)**

**A company is developing an application that will consist of different modules.**

**The different modules need to communicate asynchronously with each other.**

**Which of the following is the ideal service to use for this requirement?**

- Azure Table Storage
- Azure Notification Hubs
- Azure Blob Storage
- Azure Queue Storage

**Explanation:-**Azure Queue Storage is the perfect solution for decoupling components of an application. The Microsoft documentation mentions the following on Azure Queue storage

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**Q59)**

**A team has an Azure CosmosDB account. A solution needs to be in place to generate an alert from Azure Log Analytics when a query request charge exceeds 0 units more than 10 times during a 10-minute window.**

**Which of the following would you recommend? Choose 2 answers from the options given below.**

- Create a search query to identify when the duration\_s exceeds 10.
- Configure a period of 10 and a frequency of 10.

**Explanation:-**If you look at the table for the log entries in Azure Log Analytics, you can see that in order to monitor the request unit rate, we have to check for the requestCharge\_s log entry.

- Create a search query to identify when the requestCharge\_s exceeds 10.
- Create a search query to identify when the requestCharge\_s exceeds 40.

**Explanation:-**If you look at the table for the log entries in Azure Log Analytics, you can see that in order to monitor the request unit rate, we have to check for the requestCharge\_s log entry.

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**Q60)**

**A company currently has an on-premise network. They have an Active directory domain defined as XYZ.com. They recently purchased an Azure AD tenant and now want to synchronize users from their on-premise Active Directory domain to Azure AD. They also want to enable single-sign on the users.**

**The company decides to setup Active Directory Federation Services and setup a sync with Azure AD.**

**Would this fulfil the requirement?**

- Correct

**Explanation:-**You can use Active Directory Federation services as well. This is also mentioned in the Microsoft documentation

- Incorrect
-