Vendor: Microsoft

Exam Code: 70-533

Exam Name: Implementing Microsoft Azure Infrastructure Solutions

Version: Demo

QUESTION 1
A company deploys Microsoft SQL Server on an Azure Standard_DS3 virtual machine (VM). You need to modify the disk caching policy. Which Azure PowerShell cmdlet should you run?

A. Set-AzureRmVmOperatingSystem
B. Set-AzureRmVmDataDisk
C. Update-Disk
D. Update-AzureDisk

Correct Answer: B
Explanation:
The Set-AzureRmVMDataDisk cmdlet modifies properties of a virtual machine data disk.

QUESTION 2
You create an Azure Recovery Services vault and download the backup agent installation file. You need to complete the installation of the backup agent. What should you do first?

A. Configure network throttling.
B. Set the storage replication option.
C. Download the vault credentials file.
D. Select the data to back up.

Correct Answer: C
Explanation:
After you have created the vault, prepare your infrastructure to back up files and folders by downloading and installing the Microsoft Azure Recovery Services agent, downloading vault credentials, and then using those credentials to register the agent with the vault. You can install the agent after you have downloaded the vault credentials.

QUESTION 3
A company uses Azure to host virtual machines (VMs) and web apps. You need to ensure that you can configure a schedule to scale app services. How should you configure the app service?

A. Set the scale by metric setting to Queue.
B. Set the scale up by instances setting to 5.
C. Set the scale down by instances setting to 5.
D. Ensure that linked resources are also scaled.
E. Set the scale by metric setting to None.

Correct Answer: A
Explanation:
The Automatic scale ?Queue mode automatically scales if the number of messages in a queue goes above or below a specified threshold. Role instances are created or deleted when this happens.

QUESTION 4
You develop a new Azure Web App that uses multiple Azure Blobs and static content. The Web App uses a large number of JavaScript files and cascading style sheets. Some of these files contain references to other files. Users are geographically dispersed.

You need to minimize the time to load individual pages.

What should you do?

A. Use an Azure Content Delivery Network (CDN).
B. Implement an Azure Redis Cache.
C. Migrate the Web App to Azure Service Fabric.
D. Create a services layer by using an Azure-hosted ASP.NET web API.
E. Enable the always On feature of the Web App.

Correct Answer: A

QUESTION 5
You are an administrator of the Azure subscription for your company. You are updating an Azure Resource Manager (ARM) template. You need to ensure that the JSON file uses the latest version available. Which template element should you modify?

A. parameters
B. resources
C. $schema
D. variables

Correct Answer: A

QUESTION 6
You are designing an Azure web application. The solution will be used by multiple customers. Each customer has different business logic and user interface requirements. Not all customers use the same version of the .NET runtime.

You need to recommend a deployment strategy.

What should you recommend?

A. Deploy with multiple web role instances.
B. Deploy each application in a separate tenant.
C. Deploy all applications in one tenant.
D. Deploy with multiple worker role instances.

Correct Answer: B
Explanation:
There are two types of tenant environments. The simplest type is a single-tenant application where one customer has 100% dedicated access to an application's process space. A single Tenant Applications has a separate, logical instance of the application for each customer or client. A single tenant application is much more predictable and stable by its nature since there will never be more than one dedicated customer at any point in time in that VM. That customer has all of its users accessing that dedicated instance of the application.

References:
http://sanganakauthority.blogspot.in/2011/12/multi-tenancy-and-windows-azure.html

QUESTION 7
You are designing an Azure Web App that will use one worker role. The Web App does not use

SQL Database.

You have the following requirements:

▪ Maximize throughput and system resource availability
▪ Minimize downtime during scaling

You need to recommend an approach for scaling the application.

Which approach should you recommend?

A. Increase the role instance size.
B. Set up horizontal partitioning.
C. Increase the number of role instances.
D. Set up vertical partitioning.

Correct Answer: C
Explanation:
On the Scale page of the Azure Management Portal, you can manually scale your application or you can set parameters to automatically scale it. You can scale applications that are running Web Roles, Worker Roles, or Virtual Machines. To scale an application that is running instances of Web Roles or Worker Roles, you add or remove role instances to accommodate the work load.

References:
http://azure.microsoft.com/en-gb/documentation/articles/cloud-services-how-to-scale/

QUESTION 8
You are evaluating an Azure application. The application includes the following elements:

▪ A web role that provides the ASP.NET user interface and business logic
▪ A single SQL database that contains all application data

Each webpage must receive data from the business logic layer before returning results to the client. Traffic has increased significantly. The business logic is causing high CPU usage.

You need to recommend an approach for scaling the application.

What should you recommend?

A. Store the business logic results in Azure Table storage.
B. Vertically partition the SQL database.
C. Move the business logic to a worker role.
D. Store the business logic results in Azure local storage.

Correct Answer: C
Explanation:
For Cloud Services in Azure applications need both web and worker roles to scale well.

References:
https://msdn.microsoft.com/en-us/library/azure/dn574746.aspx

QUESTION 9

Which of the following describes what is meant by the ITIL Service Strategy component?

A. Defining processes required to manage the solution.
B. Designing the solution to the ITIL specifications.
C. Ensuring changes are designed to meet customer expectations.
D. Understanding the intended customer and what services are required.

Correct Answer: D
Explanation:
The objective of ITIL Service Strategy is to decide on a strategy to serve customers. Starting from an assessment of customer needs and the market place, the Service Strategy lifecycle stage determines which services the IT organization is to offer and what capabilities need to be developed. Its ultimate goal is to make the IT organization think and act in a strategic manner.

References:
http://wiki.en.it-processmaps.com/index.php/ITIL_Service_Strategy

QUESTION 10
A company is designing a new web-based software application that must be highly available and resistant. Which of the following is the BEST environment for the application?

A. The primary instance of the application will be locally hosted with a weekly copy of the instance send to a cloud service provider.
B. The primary instance of the application will be locally hosted with a nightly file-level backup being performed to an off-site location.
C. The primary instance of the application will be running a cloud service provider's hosted environment with a continuous backup to the company's local infrastructure.
D. The primary instance of the application will be locally hosted with a nightly copy of the instance sent to a client service provider.

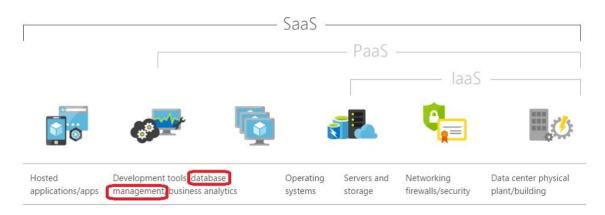**Correct Answer:** C

QUESTION 11
A cloud computing vendor is focusing on delivering applications to customers. The goal is to simplify the deployment of database functionality while removing the need for customers to manage the operation system and application patching. Which of the following types of solution is the vendor offering?

A. IT as a Service
B. Infrastructure as a Service
C. Anything as a Service
D. Platform as a Service
E. Software as a Service

Correct Answer: D
Explanation:
PaaS includes infrastructure--servers, storage, and networking--but also middleware, development tools, business intelligence (BI) services, database management systems, and more.

Note:

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

QUESTION 12
Which of the following are the MOST important benefits of a cloud computing solution for an application development provider? (Select two.)

A. Reduced training time for new developers
B. Reduced storage requirements.
C. Reduced complexity for users.
D. Reduced bandwidth usage.
E. Reduced cost.
F. Reduced development timeframe.

Correct Answer: EF
Explanation:
The biggest promise of Azure-based applications is the ability to write them to scale as needed in real-time. Customers will therefore only use the amount of resources they need, rather than budgeting a set amount of resources that can overtax or underutilize their current setup.

References:
http://searchcloudcomputing.techtarget.com/tutorial/An-introduction-to-developing-for-Microsoft-Azure

QUESTION 13
A company has an existing on-premises Active Directory environment that is synchronized using DirSync. They plan to transition the DirSync deployment to Azure Active Directory (Azure AD) Connect. You need to identify a transition path for the company. What should you do?

A. Install a new on-premises domain controller.
B. Create a new Azure AD instance.
C. Upgrade the on-premises Active Directory Domain Service (AD DS) forest functional level to Windows Server 2016.
D. Deploy Azure AD Connect in parallel.

Correct Answer: D

QUESTION 14
You are designing a Windows Azure application. The application includes two web roles and three instances of a worker role. The web roles will send requests to the worker role through one or more Windows Azure Queues. You have the following requirements:

- Ensure that each request is processed exactly one time.
- Minimize the idle time of each worker role instance.
- Maximize the reliability of request processing.

You need to recommend a queue design for sending requests to the worker role.

What should you recommend?

A. Create a queue for each combination of web roles and worker role instances. Send requests to all worker role instances based on the sending web role.
B. Create a single queue. Send all requests on the single queue.
C. Create a queue for each worker role instance. Send requests on each worker queue by using a round robin rotation.
D. Create a queue for each web role. Send requests on all queues at the same time.

Correct Answer: B
Explanation:
To communicate with the worker role, a web role instance places messages on to a queue. A worker role instance polls the queue for new messages, retrieves them, and processes them. There are a couple of important things to know about the way the queue service works in Azure. First, you reference a queue by name, and multiple role instances can share a single queue. Second, there is no concept of a typed message; you construct a message from either a string or a byte array. An individual message can be no more than 64 kilobytes (KB) in size.

References:
https://msdn.microsoft.com/en-gb/library/ff803365.aspx
http://azure.microsoft.com/en-gb/documentation/articles/cloud-services-dotnet-multi-tier-app-using-service-bus-queues/

QUESTION 15
You are designing an Azure application that provides online backup storage for hundreds of media files. Each file is larger than 1GB.

The data storage solution has the following requirements:

- be capable of storing an average of 2 terabytes (TB) of data for each user
- support sharing of data between all Microsoft Azure instances
- provide random read/write access

You need to recommend a durable data storage solution.

What should you recommend?

A. store data in a VHD file
B. Azure Page Blob
C. Azure Block Blob
D. local storage on the VM

Correct Answer: B

QUESTION 16
You have an ASP.NET application that runs in a cloud service. A new version of the application is
ready for release. The new version contains code changes and new SSL certificates. The
application consists of six instances of a web role and four instances of a worker role.

The application performs at or near full capacity. The cloud service uses the default number of
fault domains and upgrade domains.

You plan to deploy the new version of the application. The performance and capacity of the web
roles must not degrade during the deployment. Temporary degradation of the worker roles is
acceptable. The deployment must take a maximum of six hours.

You need to deploy the new version of the ASP.NET application to the cloud service.

Which two approaches will achieve the goal? Each correct answer presents a complete solution.

A. Increase the number of web role instances to eight, and then deploy the new version of the
   application by using an in-place update. Reduce the number of web role instances to six after the
   upgrade is completed.
B. Deploy the new version of the application by using an in-place update. Use upgrade domains to
   ensure that there is sufficient capacity during the upgrade.
C. Deploy the new version of the application into the staging slot for the cloud service. Then activate
   the new version of the application by swapping virtual IP (VIP) addresses.
D. Delete the old version of the application, and deploy the new version of the application.

Correct Answer: BC

QUESTION 17
An application sends Azure push notifications to a client application that runs on Windows Phone,
iOS, and Android devices. Users cannot use the application on some devices. The authentication
mechanisms that the application uses are the source of the problem.

You need to monitor the number of notifications that failed because of authentication errors.
Which three metrics should you monitor? Each correct answer presents part of the solution

A. Microsoft Push Notification Service (MPNS) authentication errors
B. External notification system errors
C. Apple Push Notification Service (APNS) authentication errors
D. Channel errors
E. Windows Push Notification Services (WNS) authentication errors
F. Google Cloud Messaging (GCM) authentication errors

Correct Answer: ACF
Explanation:
You must provision your app with one or more of the following services:
Microsoft Push Notification Service (MPNS) for Windows Phone devices Apple Push Notification
Service (APNS) for iPad and iPhone devices Google Cloud Messaging service (GCM) for Android
devices Windows Notification Service (WNS) for Windows devices

References:

https://msdn.microsoft.com/en-us/magazine/dn879353.aspx

QUESTION 18
Using https instead of http for accessing a cloud service is considered more secure.

A. True
B. False

Correct Answer: A
Explanation:
HTTPS (also called HTTP over TLS, HTTP over SSL, and HTTP Secure) is a protocol for secure communication over a computer network which is widely used on the Internet.

References:
https://en.wikipedia.org/wiki/HTTPS

QUESTION 19
You design an Azure application that processes images. The maximum size of an image is 10 MB. The application includes a web role that allows users to upload images and a worker role with multiple instances that processes the images. The web role communicates with the worker role by using an Azure Queue service.

You need to recommend an approach for storing images that minimizes storage transactions.

What should you recommend?

A. Store images in Azure Blob service. Store references to the images in the queue.
B. Store images in the queue.
C. Store images in OneDrive attached to the worker role instances. Store references to the images in the queue.
D. Store images in local storage on the web role instance. Store references to the images in the queue.

Correct Answer: A
Explanation:
Azure Queues provide a uniform and consistent programming model across queues, tables, and BLOBs - both for developers and for operations teams. Microsoft Azure blob storage can be used to store the image data, the application can use a worker role in Azure to perform background processing tasks on the images, how the application may use shared access signatures to control access to the images by users. Azure blobs provide a series of containers aimed at storing text or binary data. Block blob containers are ideal for streaming data, while page blob containers can be used for random read/write operations.

References:
https://msdn.microsoft.com/en-gb/library/ff803365.aspx
https://msdn.microsoft.com/en-us/library/azure/hh767287.aspx

QUESTION 20
Which of the following virtualization characteristics allows the use of different types of physical types or physical servers?

A. Security

B. Hardware independence
C. Scalability
D. Variable costs

Correct Answer: B
Explanation:
Virtualization is a conversion process that translates unique IT hardware into emulated and standardized software-based copies. Through hardware independence, virtual servers can easily be moved to another virtualization host, automatically resolving multiple hardware- software incompatibility issues. As a result, cloning and manipulating virtual IT resources is much easier than duplicating physical hardware.

References:
http://whatiscloud.com/virtualization_technology/hardware_independence

QUESTION 21
You are designing an Azure application that will use a worker role. The worker role will create temporary files.

You need to minimize storage transaction charges.

Where should you create the files?

A. In Azure local storage
B. In Azure Storage page blobs
C. On an Azure Drive
D. In Azure Storage block blobs

Correct Answer: A
Explanation:
Local storage is temporary in Azure. So, if the virtual machine supporting your role dies and cannot recover, your local storage is lost! Therefore, Azure developers will tell you, only volatile data should ever be stored in local storage of Azure.

References:
http://www.intertech.com/Blog/windows-azure-local-file-storage-how-to-guide-and-warnings/
http://blog.codingoutloud.com/2011/06/12/azure-faq-can-i-write-to-the-file-system-on-windows-azure/