Question 1

tb.564416.a1.008
Lesson Reference: Assessment Test
Difficulty: easy
Adding virtual machines to an instance group can be triggered in an autoscaling policy by all of the following, except which one?

- A. CPU utilization
- B. Stackdriver metrics
- C. IAM policy violation
- D. Load balancing serving capacity

Rationale

A. CPU utilization
IAM policy violations do not trigger changes in the size of clusters. All other options can be used to trigger a change in cluster size.

Rationale

B. Stackdriver metrics
IAM policy violations do not trigger changes in the size of clusters. All other options can be used to trigger a change in cluster size.

Rationale

C. IAM policy violation
IAM policy violations do not trigger changes in the size of clusters. All other options can be used to trigger a change in cluster size.

Rationale

D. Load balancing serving capacity
IAM policy violations do not trigger changes in the size of clusters. All other options can be used to trigger a change in cluster size.

Question 2

tb.564416.a1.015
Lesson Reference: Assessment Test
Difficulty: medium
During an incident that has caused an application to fail, you suspect some resource may not have appropriate roles granted. The command to list roles granted to a resource is:

- A. `gutil iam list-grantable-roles`
- B. `gcloud iam list-grantable-roles`
- C. `gcloud list-grantable-roles`
- D. `gcloud resources grantable-roles`

Rationale

A. `gutil iam list-grantable-roles`
gcloud is the command-line tool for working with IAM, and list-grantable-roles is the correct command.

Rationale

B. `gcloud iam list-grantable-roles`
gcloud is the command-line tool for working with IAM, and list-grantable-roles is the correct command.

Rationale

C. `gcloud list-grantable-roles`
gcloud is the command-line tool for working with IAM, and list-grantable-roles is the correct command.

Rationale

D. `gcloud resources grantable-roles`
gcloud is the command-line tool for working with IAM, and list-grantable-roles is the correct command.

Question 3

tb.564416.a1.014
Lesson Reference: Assessment Test
Difficulty: easy
You have been tasked with designing an organizational hierarchy for managing departments and their cloud resources. What organizing components are available in GCP?

- A. Organization, folders, projects
- B. Buckets, directories, subdirectories
- C. Organizations, buckets, projects
- D. Folders, buckets, projects

Rationale

A. Organization, folders, projects
Organization, folders, and projects are the components used to manage an organizational hierarchy. Buckets, directories, and subdirectories are used to organize storage.

Rationale

B. Buckets, directories, subdirectories
Organization, folders, and projects are the components used to manage an organizational hierarchy. Buckets, directories, and subdirectories are used to organize storage.

Rationale

C. Organizations, buckets, projects
Organization, folders, and projects are the components used to manage an organizational hierarchy. Buckets, directories, and subdirectories are used to organize storage.

Rationale

D. Folders, buckets, projects

Organization, folders, and projects are the components used to manage an organizational hierarchy. Buckets, directories, and subdirectories are used to organize storage.

Question 4

tb.564416.a1.021
Lesson Reference: Assessment Test
Difficulty: medium
Your company has just started using Google Cloud Platform, and executives want to have a dedicated connection from your data center to the GCP to allow for large data transfers. Which networking service would you recommend?

- A. Google Cloud Carrier Internet Peering
- B. Google Cloud Interconnect – Dedicated
- C. Google Cloud Internet Peering
- D. Google Cloud DNS

Rationale

A. Google Cloud Carrier Internet Peering
Google Cloud Interconnect – Dedicated is the only option for a dedicated connection between a customer's data center and a Google data center.

Rationale

B. Google Cloud Interconnect – Dedicated
Google Cloud Interconnect – Dedicated is the only option for a dedicated connection between a customer's data center and a Google data center.

Rationale

C. Google Cloud Internet Peering
Google Cloud Interconnect – Dedicated is the only option for a dedicated connection between a customer's data center and a Google data center.

Rationale

D. Google Cloud DNS

Google Cloud Interconnect – Dedicated is the only option for a dedicated connection between a customer's data center and a Google data center.

Question 5

tb.564416.a1.025
Lesson Reference: Assessment Test
Difficulty: easy
Code for cloud functions can be written in:

- (●) A. Node.js and Python
- ( ) B. Node.js, Python, and Go
- ( ) C. Python and Go
- ( ) D. Python and C

Rationale

✓ **A. Node.js and Python**
Node.js 6, Node.js 8, and Python are the languages supported by Cloud Functions.

Rationale

✗ **B. Node.js, Python, and Go**
Node.js 6, Node.js 8, and Python are the languages supported by Cloud Functions.

Rationale

✗ **C. Python and Go**
Node.js 6, Node.js 8, and Python are the languages supported by Cloud Functions.

Rationale

✗ **D. Python and C**
Node.js 6, Node.js 8, and Python are the languages supported by Cloud Functions.

Question 6

tb.564416.a1.017
Lesson Reference: Assessment Test
Difficulty: hard
To create a custom role, a user must possess which role?

- A. `iam.create`
- B. `compute.roles.create`
- C. `iam.roles.create`
- D. `Compute.roles.add`

Rationale

A. `iam.create`
iam.roles.create is correct; the other roles do not exist.

Rationale

B. `compute.roles.create`
iam.roles.create is correct; the other roles do not exist.

Rationale

C. `iam.roles.create`
iam.roles.create is correct; the other roles do not exist.

Rationale

D. `Compute.roles.add`
iam.roles.create is correct; the other roles do not exist.

Question 7

tb.564416.a1.016
Lesson Reference: Assessment Test
Difficulty: medium
The availability of CPU platforms can vary between zones. To get a list of all CPU types available in a particular zone, you should use:

- A. `gcloud compute zones describe`
- B. `gcloud iam zones describe`
- C. `gutil zones describe`
- D. `gcloud compute regions list`

Rationale

A. `gcloud compute zones describe`
gcloud is the command-line tool for manipulating compute resources, and zones describe is the correct command.

Rationale

B. `gcloud iam zones describe`
gcloud is the command-line tool for manipulating compute resources, and zones describe is the correct command.

Rationale

C. `gutil zones describe`
gcloud is the command-line tool for manipulating compute resources, and zones describe is the correct command.

Rationale

D. `gcloud compute regions list`
gcloud is the command-line tool for manipulating compute resources, and zones describe is the correct command.

Question 8

tb.564416.a1.012
Lesson Reference: Assessment Test
Difficulty: medium
You have been hired as a consultant to a startup in the Internet of Things (IoT) space. The startup will stream large volumes of data into Google Cloud Platform. The data needs to be filtered, transformed, and analyzed before being stored in GCP data store. A good option for the stream processing component is:

- A. DataProc
- B. Cloud DataFlow
- C. Cloud Endpoints
- D. Cloud Interconnect

Rationale

A. DataProc
Cloud DataFlow allows for stream and batch processing of data and is well suited for this kind of ETL work. DataProc is a managed Hadoop and Spark service that is used for big data analytics. Cloud Endpoints is an API service, and Cloud Interconnect is a network service.

Rationale

B. Cloud DataFlow
Cloud DataFlow allows for stream and batch processing of data and is well suited for this kind of ETL work. DataProc is a managed Hadoop and Spark service that is used for big data analytics. Cloud Endpoints is an API service, and Cloud Interconnect is a network service.

Rationale

C. Cloud Endpoints
Cloud DataFlow allows for stream and batch processing of data and is well suited for this kind of ETL work. DataProc is a managed Hadoop and Spark service that is used for big data analytics. Cloud Endpoints is an API service, and Cloud Interconnect is a network service.

Rationale

D. Cloud Interconnect

Cloud DataFlow allows for stream and batch processing of data and is well suited for this kind of ETL work. DataProc is a managed Hadoop and Spark service that is used for big data analytics. Cloud Endpoints is an API service, and Cloud Interconnect is a network service.

Question 9

tb.564416.a1.010
Lesson Reference: Assessment Test
Difficulty: easy
The marketing department in your company wants to deploy a web application but does not want to have to manage servers or clusters. A good option for them is:

- A. Compute Engine
- B. Kubernetes Engine
- C. App Engine
- D. Cloud Functions

Rationale

A. Compute Engine
App Engine is a platform as a service that allows developers to deploy full applications without having to manage servers or clusters. Compute Engine and Kubernetes Engine require management of servers. Cloud Functions is suitable for short running Node.js or Python functions but not full applications.

Rationale

B. Kubernetes Engine
App Engine is a platform as a service that allows developers to deploy full applications without having to manage servers or clusters. Compute Engine and Kubernetes Engine require management of servers. Cloud Functions is suitable for short running Node.js or Python functions but not full applications.

Rationale

C. App Engine
App Engine is a platform as a service that allows developers to deploy full applications without having to manage servers or clusters. Compute Engine and Kubernetes Engine require management of servers. Cloud Functions is suitable for short running Node.js or Python functions but not full applications.

Rationale

D. Cloud Functions

App Engine is a platform as a service that allows developers to deploy full applications without having to manage servers or clusters. Compute Engine and Kubernetes Engine require management of servers. Cloud Functions is suitable for short running Node.js or Python functions but not full applications.

Question 10

tb.564416.a1.018

Lesson Reference: Assessment Test

Difficulty: hard

You have been asked to create a network with 1,000 IP addresses. In the interest of minimizing unused IP addresses, which CIDR suffix would you use to create a network with at least 1,000 address but no more than necessary?

- A. /20
- B. /22
- C. /28
- D. /32

Rationale

A. /20

The /22 suffix produces 1,022 usable IP addresses.

Rationale

B. /22

The /22 suffix produces 1,022 usable IP addresses.

Rationale

C. /28

The /22 suffix produces 1,022 usable IP addresses.

Rationale

D. /32

The /22 suffix produces 1,022 usable IP addresses.

Question 11

tb.564416.a1.024
Lesson Reference: Assessment Test
Difficulty: easy
The GCP service for storing and managing Docker containers is:

- A. Cloud Source Repositories
- B. Cloud Build
- C. Container Registry
- D. Docker Repository

Rationale

A. Cloud Source Repositories
The GCP service for storing and managing Docker containers is Container Registry. Cloud Build is for creating images. The others are not GCP services.

Rationale

B. Cloud Build
The GCP service for storing and managing Docker containers is Container Registry. Cloud Build is for creating images. The others are not GCP services.

Rationale

C. Container Registry
The GCP service for storing and managing Docker containers is Container Registry. Cloud Build is for creating images. The others are not GCP services.

Rationale

D. Docker Repository

The GCP service for storing and managing Docker containers is Container Registry. Cloud Build is for creating images. The others are not GCP services.

Question 12

tb.564416.a1.019
Lesson Reference: Assessment Test
Difficulty: easy

A team of data scientists have asked for your help setting up an Apache Spark cluster. You suggest they use a managed GCP service instead of managing a cluster themselves on Compute Engine. The service they would use is:

- A. Cloud DataProc
- B. Cloud DataFlow
- C. Cloud Hadoop
- D. BigQuery

Rationale

A. Cloud DataProc

Cloud DataProc is the managed Spark service. Cloud DataFlow is for stream and batch processing of data, BigQuery is for analytics, and Cloud Hadoop is not a GCP service.

Rationale

B. Cloud DataFlow

Cloud DataProc is the managed Spark service. Cloud DataFlow is for stream and batch processing of data, BigQuery is for analytics, and Cloud Hadoop is not a GCP service.

Rationale

C. Cloud Hadoop

Cloud DataProc is the managed Spark service. Cloud DataFlow is for stream and batch processing of data, BigQuery is for analytics, and Cloud Hadoop is not a GCP service.

Rationale

D. BigQuery

Cloud DataProc is the managed Spark service. Cloud DataFlow is for stream and batch processing of data, BigQuery is for analytics, and Cloud Hadoop is not a GCP service.

Question 13

tb.564416.a1.007
Lesson Reference: Assessment Test
Difficulty: easy
All of the following are components of firewall rules except which one?

- A. Direction of traffic
- B. Action on match
- C. Time to live (TTL)
- D. Protocol

Rationale

A. Direction of traffic
Firewall rules do not have time-to-live parameters. Direction of traffic, action on match, and protocol are all components of firewall rules.

Rationale

B. Action on match
Firewall rules do not have time-to-live parameters. Direction of traffic, action on match, and protocol are all components of firewall rules.

Rationale

C. Time to live (TTL)
Firewall rules do not have time-to-live parameters. Direction of traffic, action on match, and protocol are all components of firewall rules.

Rationale

D. Protocol
Firewall rules do not have time-to-live parameters. Direction of traffic, action on match, and protocol are all components of firewall rules.

Question 14

tb.564416.a1.011

Lesson Reference: Assessment Test

Difficulty: easy

Your company is building an enterprise data warehouse and wants SQL query capabilities over petabytes of data but do not want to manage servers or clusters. A good option for them is:

- A. Cloud Storage
- B. BigQuery
- C. Bigtable
- D. Datastore

Rationale

A. Cloud Storage

BigQuery is designed for petabyte-scale analytics and provides a SQL interface.

Rationale

B. BigQuery

BigQuery is designed for petabyte-scale analytics and provides a SQL interface.

Rationale

C. Bigtable

BigQuery is designed for petabyte-scale analytics and provides a SQL interface.

Rationale

D. Datastore

BigQuery is designed for petabyte-scale analytics and provides a SQL interface.

Question 15

tb.564416.a1.005

Lesson Reference: Assessment Test

Difficulty: medium

Virtual private clouds (VPCs) are _____ resources.

- A. Regional
- B. Zonal
- C. Global
- D. Subnets

Rationale

A. Regional

Google operates a global network, and virtual private clouds (VPCs) are resources that can span that global network.

Rationale

B. Zonal

Google operates a global network, and virtual private clouds (VPCs) are resources that can span that global network.

Rationale

C. Global

Google operates a global network, and virtual private clouds (VPCs) are resources that can span that global network.

Rationale

D. Subnets

Google operates a global network, and virtual private clouds (VPCs) are resources that can span that global network.

Question 16

tb.564416.a1.013
Lesson Reference: Assessment Test
Difficulty: easy
Preemptible virtual machines may be shut down at any time but will always be shut down after running:

- A. 6 hours
- B. 12 hours
- C. 24 hours
- D. 48 hours

Rationale

A. 6 hours
If a preemptible machine has not been shut down within 24 hours, Google will stop the instance.

Rationale

B. 12 hours
If a preemptible machine has not been shut down within 24 hours, Google will stop the instance.

Rationale

C. 24 hours
If a preemptible machine has not been shut down within 24 hours, Google will stop the instance.

Rationale

D. 48 hours
If a preemptible machine has not been shut down within 24 hours, Google will stop the instance.

Question 17

tb.564416.a1.004
Lesson Reference: Assessment Test
Difficulty: medium

An education client maintains a site where users can upload videos, and your client needs to assure redundancy for the files; therefore, you have created two buckets for Cloud Storage. Which command do you use to synchronize the contents of the two buckets?

- A. `gsutil rsync`
- B. `gcloud cp sync`
- C. `gcloud rsync`
- D. `gsutil cp sync`

Rationale

A. `gsutil rsync`
gsutil is the command-line tool for working with Cloud Storage. rsync is the specific command in gsutil for synchronizing buckets.

Rationale

B. `gcloud cp sync`
gsutil is the command-line tool for working with Cloud Storage. rsync is the specific command in gsutil for synchronizing buckets.

Rationale

C. `gcloud rsync`
gsutil is the command-line tool for working with Cloud Storage. rsync is the specific command in gsutil for synchronizing buckets.

Rationale

D. `gsutil cp sync`
gsutil is the command-line tool for working with Cloud Storage. rsync is the specific command in gsutil for synchronizing buckets.

Question 18

tb.564416.a1.006
Lesson Reference: Assessment Test
Difficulty: medium

A remote component in your network has failed, which results in a transient network error. When you submit a `gsutil` command, it fails because of a transient error. By default, the command will:

- A. Terminate and log a message to Stackdriver
- B. Retry using a truncated binary exponential back-off strategy
- C. Prompt the user to decide to retry or quit
- D. Terminate and log a message to the Cloud Shell

Rationale

A. Terminate and log a message to Stackdriver

gcloud by default will retry a failed network operation and will wait a long time period before each retry. The time to wait is calculated using a truncated binary exponential back-off strategy.

Rationale

B. Retry using a truncated binary exponential back-off strategy

gcloud by default will retry a failed network operation and will wait a long time period before each retry. The time to wait is calculated using a truncated binary exponential back-off strategy.

Rationale

C. Prompt the user to decide to retry or quit

gcloud by default will retry a failed network operation and will wait a long time period before each retry. The time to wait is calculated using a truncated binary exponential back-off strategy.

Rationale

D. Terminate and log a message to the Cloud Shell

gcloud by default will retry a failed network operation and will wait a long time period before each retry. The time to wait is calculated using a truncated binary exponential back-off strategy.

Question 19

tb.564416.a1.003
Lesson Reference: Assessment Test
Difficulty: easy

Your company has an object management policy that requires objects stored in Cloud Storage to be migrated from regional storage to nearline storage 90 days after the object is created. The most efficient way to do this is to:

- A. Create a cloud function to copy objects from regional storage to nearline storage
- B. Set the `MigrateObjectAfter` property on the stored object to 90 days
- C. Copy the object to persistent storage attached to a virtual machine and then copy the object to a bucket created on nearline storage
- D. Create a lifecycle management configuration policy specifying an age of 90 days and `SetStorageClass` as nearline.

Rationale

A. Create a cloud function to copy objects from regional storage to nearline storage

The lifecycle configuration policy allows administrators to specify criteria for migrating data to other storage system without having to concern themselves with running jobs to actually execute the necessary steps. The other options are inefficient or do not exist.

Rationale

B. Set the `MigrateObjectAfter` property on the stored object to 90 days

The lifecycle configuration policy allows administrators to specify criteria for migrating data to other storage system without having to concern themselves with running jobs to actually execute the necessary steps. The other options are inefficient or do not exist.

Rationale

C. Copy the object to persistent storage attached to a virtual machine and then copy the object to a bucket created on nearline storage

The lifecycle configuration policy allows administrators to specify criteria for migrating data to other storage system without having to concern themselves with running jobs to actually execute the necessary steps. The other options are inefficient or do not exist.

Rationale

D. Create a lifecycle management configuration policy specifying an age of 90 days and `SetStorageClass` as nearline.
The lifecycle configuration policy allows administrators to specify criteria for migrating data to other storage system without having to concern themselves with running jobs to actually execute the necessary steps. The other options are inefficient or do not exist.

Question 20

tb.564416.a1.009
Lesson Reference: Assessment Test
Difficulty: easy
Your company's finance department is developing a new account management application that requires transactions and the ability to perform relational database operations using fully compliant SQL. Data store options in GCP include:

- A. Spanner and Cloud SQL
- B. Datastore and Bigtable
- C. Spanner and Cloud Storage
- D. Datastore and Cloud SQL

Rationale

A. Spanner and Cloud SQL
Only Spanner and Cloud SQL databases support transactions and have a SQL interface. Datastore has transactions but does not support fully compliant SQL; it has a SQL-like query language. Cloud Storage does not support transactions or SQL.

Rationale

B. Datastore and Bigtable
Only Spanner and Cloud SQL databases support transactions and have a SQL interface. Datastore has transactions but does not support fully compliant SQL; it has a SQL-like query language. Cloud Storage does not support transactions or SQL.

Rationale

C. Spanner and Cloud Storage
Only Spanner and Cloud SQL databases support transactions and have a SQL interface. Datastore has transactions but does not support fully compliant SQL; it has a SQL-like query language. Cloud Storage does not support transactions or SQL.

Rationale

D. Datastore and Cloud SQL

Only Spanner and Cloud SQL databases support transactions and have a SQL interface. Datastore has transactions but does not support fully compliant SQL; it has a SQL-like query language. Cloud Storage does not support transactions or SQL.

Question 21

tb.564416.a1.020
Lesson Reference: Assessment Test
Difficulty: easy

You have created a web application that allows users to upload files to Cloud Storage. When files are uploaded, you want to check the file size and update the user's total storage used in their account. A serverless option for performing this action on load is:

- A. Cloud DataFlow
- B. Cloud DataProc
- C. Cloud Storage
- D. Cloud Functions

Rationale

A. Cloud DataFlow

Cloud Functions responds to events in Cloud Storage, making them a good choice for taking an action after a file is loaded.

Rationale

B. Cloud DataProc

Cloud Functions responds to events in Cloud Storage, making them a good choice for taking an action after a file is loaded.

Rationale

C. Cloud Storage

Cloud Functions responds to events in Cloud Storage, making them a good choice for taking an action after a file is loaded.

Rationale

D. Cloud Functions

Cloud Functions responds to events in Cloud Storage, making them a good choice for taking an action after a file is loaded.

Question 22

tb.564416.a1.022
Lesson Reference: Assessment Test
Difficulty: medium

You want to have Google Cloud Platform manage cryptographic keys, so you've decided to use Cloud Key Management Services. Before you can start creating cryptographic, you must:

- (●) A. Enable Google Cloud Key Management Service (KMS) API and set up billing
- ( ) B. Enable Google Cloud Key Management Service (KMS) API and create folders
- ( ) C. Create folders and set up billing
- ( ) D. Give the all users grantable roles to create keys

Rationale

✓ **A. Enable Google Cloud Key Management Service (KMS) API and set up billing**
Enabling the Google Cloud Key Management Service (KMS) API and setting up billing are steps are common to using GCP services.

Rationale

✗ **B. Enable Google Cloud Key Management Service (KMS) API and create folders**
Enabling the Google Cloud Key Management Service (KMS) API and setting up billing are steps are common to using GCP services.

Rationale

✗ **C. Create folders and set up billing**
Enabling the Google Cloud Key Management Service (KMS) API and setting up billing are steps are common to using GCP services.

Rationale

✗ **D. Give the all users grantable roles to create keys**
Enabling the Google Cloud Key Management Service (KMS) API and setting up billing are steps are common to using GCP services.

Question 23

tb.564416.a1.023
Lesson Reference: Assessment Test
Difficulty: medium
In Kubernetes Engine, a node pool is:

- A. A subset of nodes across clusters
- B. A set of virtual machines managed outside of Kubernetes Engine
- C. A set of preemptible virtual machines
- D. A subset of node instances within a cluster that all have the same configuration

Rationale

A. A subset of nodes across clusters
A node pool is a subset of node instances within a cluster that all have the same configuration.

Rationale

B. A set of virtual machines managed outside of Kubernetes Engine
A node pool is a subset of node instances within a cluster that all have the same configuration.

Rationale

C. A set of preemptible virtual machines
A node pool is a subset of node instances within a cluster that all have the same configuration.

Rationale

D. A subset of node instances within a cluster that all have the same configuration
A node pool is a subset of node instances within a cluster that all have the same configuration.

Question 24

tb.564416.a1.001
Lesson Reference: Assessment Test
Difficulty: medium
Instance templates are used to create a group of identical virtual machines. The instance templates include:

- A. Machine type, boot disk image or container image, zone, and labels
- B. Cloud Storage bucket definitions
- C. A load balancer description
- D. App Engine configuration file

Rationale

A. Machine type, boot disk image or container image, zone, and labels
Machine type, boot disk image or container image, zone, and labels are all configuration parameters or attributes of a virtual machine and therefore would be included in an instance group configuration that creates those virtual machines.

Rationale

B. Cloud Storage bucket definitions
Machine type, boot disk image or container image, zone, and labels are all configuration parameters or attributes of a virtual machine and therefore would be included in an instance group configuration that creates those virtual machines.

Rationale

C. A load balancer description
Machine type, boot disk image or container image, zone, and labels are all configuration parameters or attributes of a virtual machine and therefore would be included in an instance group configuration that creates those virtual machines.

Rationale

D. App Engine configuration file

Machine type, boot disk image or container image, zone, and labels are all configuration parameters or attributes of a virtual machine and therefore would be included in an instance group configuration that creates those virtual machines.

Question 25

tb.564416.a1.002
Lesson Reference: Assessment Test
Difficulty: easy
The command-line command to create a Cloud Storage bucket is:

- A. `gcloud mb`
- B. `gsutil mb`
- C. `gcloud mkbucket`
- D. `gsutil mkbucket`

Rationale

A. `gcloud mb`
gsutil is the command line for accessing and manipulating Cloud Storage from the command line. mb is the specific command for creating, or making, a bucket.

Rationale

B. `gsutil mb`
gsutil is the command line for accessing and manipulating Cloud Storage from the command line. mb is the specific command for creating, or making, a bucket.

Rationale

C. `gcloud mkbucket`
gsutil is the command line for accessing and manipulating Cloud Storage from the command line. mb is the specific command for creating, or making, a bucket.

Rationale

D. `gsutil mkbucket`

gsutil is the command line for accessing and manipulating Cloud Storage from the command line. mb is the specific command for creating, or making, a bucket.