# Google Cloud Certified - Associate Cloud Engineer.24q

Number: GoogleCloudEngineer
Passing Score: 800
Time Limit: 120 min



Google Cloud Certified – Associate Cloud Engineer

## Exam A

## **QUESTION 1**

Your company uses Cloud Storage to store application backup files for disaster recovery purposes. You want to follow Google's recommended practices. Which storage option should you use?



- A. Multi-Regional Storage
- B. Regional Storage
- C. Nearline Storage
- D. Coldline Storage

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Reference: https://cloud.google.com/storage/docs/storage-classes#nearline

#### **QUESTION 2**

Several employees at your company have been creating projects with Cloud Platform and paying for it with their personal credit cards, which the company reimburses. The company wants to centralize all these projects under a single, new billing account. What should you do?

- A. Contact cloud-billing@google.com with your bank account details and request a corporate billing account for your company.
- B. Create a ticket with Google Support and wait for their call to share your credit card details over the phone.
- C. In the Google Platform Console, go to the Resource Manage and move all projects to the root Organizarion.
- D. In the Google Cloud Platform Console, create a new billing account and set up a payment method.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Reference: https://www.whizlabs.com/blog/google-cloud-interview-questions/

#### **QUESTION 3**

You are deploying an application to App Engine. You want the number of instances to scale based on request rate. You need at least 3 unoccupied instances at all times. Which scaling type should you use?

- A. Manual Scaling with 3 instances.
- B. Basic Scaling with min instances set to 3.
- C. Basic Scaling with max instances set to 3.
- D. Automatic Scaling with min\_idle\_instances set to 3.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Reference: https://cloud.google.com/appengine/docs/standard/python/how-instances-are-managed

#### **QUESTION 4**

You have a development project with appropriate IAM roles defined. You are creating a production project and want to have the same IAM roles on the new project, using the fewest possible steps. What should you do?

- A. Use gcloud iam roles copy and specify the production project as the destination project.
- B. Use gcloud iam roles copy and specify your organization as the destination organization.
- C. In the Google Cloud Platform Console, use the 'create role from role' functionality.
- D. In the Google Cloud Platform Console, use the 'create role' functionality and select all applicable permissions.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Reference: <a href="https://cloud.google.com/sdk/gcloud/reference/iam/roles/copy">https://cloud.google.com/sdk/gcloud/reference/iam/roles/copy</a>

#### **QUESTION 5**

You need a dynamic way of provisioning VMs on Compute Engine. The exact specifications will be in a dedicated configuration file. You want to follow Google's recommended practices. Which method should you use?

A. Deployment Manager

- B. Cloud Composer
- C. Managed Instance Group
- D. Unmanaged Instance Group

# **Explanation/Reference:**

Reference: <a href="https://cloud.google.com/compute/docs/instances/">https://cloud.google.com/compute/docs/instances/</a>

#### **QUESTION 6**

You have a single binary application that you want to run on Google Cloud Platform. You decided to automatically scale the application based on underlying infrastructure CPU usage. Your organizational policies require you to use virtual machines directly. You need to ensure that the application scaling is operationally efficient and completed as quickly as possible. What should you do?

- A. Create a Google Kubernetes Engine cluster, and use horizontal pod autoscaling to scale the application.
- B. Create an instance template, and use the template in a managed instance group with autoscaling configured.
- C. Create an instance template, and use the template in a managed instance group that scales up and down based on the time of day.
- D. Use a set of third-party tools to build automation around scaling the application up and down, based on Stackdriver CPU usage monitoring.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

## **QUESTION 7**

You are analyzing Google Cloud Platform service costs from three separate projects. You want to use this information to create service cost estimates by service type, daily and monthly, for the next six months using standard query syntax. What should you do?

- A. Export your bill to a Cloud Storage bucket and then import into Cloud Bigtable for analysis.
- B. Export your bill to a Cloud Storage bucket, and then import into Google Sheets for analysis.
- C. Export your transactions to a local file and perform analysis with a desktop tool.
- D. Export your bill to a BigQuery dataset, and then write time window-based SQL queries for analysis.

Correct Answer: D Section: (none)

## **Explanation**

# **Explanation/Reference:**

#### **QUESTION 8**

You need to set up a policy so that videos stored in a specific Cloud Storage Regional bucket are moved to Coldline after 90 days, and then deleted after one year from their creation. How should you set up the policy?

- A. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 275 days (365 90)
- B. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 365 days.
- C. Use gsutil rewrite and set the Delete action to 275 days (365-90).
- D. Use gsutil rewrite and set the Delete action to 365 days.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 9**

You have a Linux VM that must connect to Cloud SQL. You created a service account with the appropriate access rights. You want to make sure that the VM uses this service account instead of the default Compute Engine service account. What should you do?

- A. When creating the VM via the web console, specify the service account under the 'Identity and API Access' section.
- B. Download a JSON Private Key for the service account. On the Project Metadata, add that JSON as the value for the key compute-engine-service-account.
- C. Download a JSON Private Key for the service account. On the Custom Metadata of the VM, add that JSON as the value for the key compute-engine-service-account.
- D. Download a JSON Private Key for the service account. After creating the VM, ssh into the VM and save the JSON under ~/.gcloud/compute-engine-service-account.json.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Reference: https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances

## **QUESTION 10**

You created an instance of SQL Server 2017 on Compute Engine to test features in the new version. You want to connect to this instance using the fewest number of steps. What should you do?

- A. Install a RDP client on your desktop. Verify that a firewall rule for port 3389 exists.
- B. Install a RDP client in your desktop. Set a Windows username and password in the GCP Console. Use the credentials to log in to the instance.
- C. Set a Windows password in the GCP Console. Verify that a firewall rule for port 22 exists. Click the RDP button in the GCP Console and supply the credentials to log in.
- D. Set a Windows username and password in the GCP Console. Verify that a firewall rule for port 3389 exists. Click the RDP button in the GCP Console, and supply the credentials to log in.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Reference: https://medium.com/falafel-software/sql-server-in-the-google-cloud-a17e8a1f11ce

## **QUESTION 11**

You have one GCP account running in your default region and zone and another account running in a non-default region and zone. You want to start a new Compute Engine instance in these two Google Cloud Platform accounts using the command line interface. What should you do?



- A. Create two configurations using gcloud config configurations create [NAME]. Run gcloud config configurations activate [NAME] to switch between accounts when running the commands to start the Compute Engine instances.
- B. Create two configurations using gcloud config configurations create [NAME]. Run gcloud configurations list to start the Compute Engine instances.
- C. Activate two configurations using gcloud configurations activate [NAME]. Run gcloud config list to start the Compute Engine instances.
- D. Activate two configurations using gcloud configurations activate [NAME]. Run gcloud configurations list to start the Compute Engine instances.

# **Explanation/Reference:**

Reference: https://cloud.google.com/sdk/gcloud/reference/config/configurations/activate

## **QUESTION 12**

You significantly changed a complex Deployment Manager template and want to confirm that the dependencies of all defined resources are properly met before committing it to the project. You want the most rapid feedback on your changes. What should you do?

- A. Use granular logging statements within a Deployment Manager template authored in Python.
- B. Monitor activity of the Deployment Manager execution on the Stackdriver Logging page of the GCP Console.
- C. Execute the Deployment Manager template against a separate project with the same configuration, and monitor for failures.
- D. Execute the Deployment Manager template using the --preview option in the same project, and observe the state of interdependent resources.

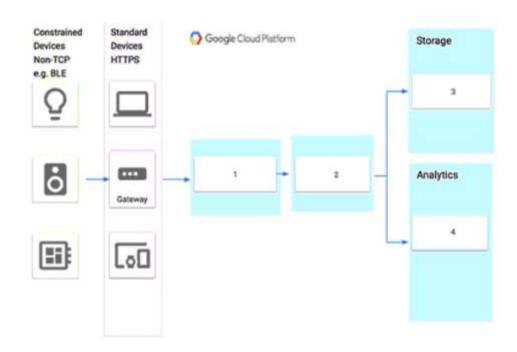
Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Reference: <a href="https://cloud.google.com/deployment-manager/docs/deployments/updating-deployments">https://cloud.google.com/deployment-manager/docs/deployments/updating-deployments</a>

#### **QUESTION 13**

You are building a pipeline to process time-series data. Which Google Cloud Platform services should you put in boxes 1,2,3, and 4?



- A. Cloud Pub/Sub, Cloud Dataflow, Cloud Datastore, BigQuery
- B. Firebase Messages, Cloud Pub/Sub, Cloud Spanner, BigQuery
- C. Cloud Pub/Sub, Cloud Storage, BigQuery, Cloud Bigtable
- D. Cloud Pub/Sub, Cloud Dataflow, Cloud Bigtable, BigQuery

# Explanation/Reference:

Reference: <a href="https://cloud.google.com/solutions/correlating-time-series-dataflow">https://cloud.google.com/solutions/correlating-time-series-dataflow</a>

## **QUESTION 14**

You have a project for your App Engine application that serves a development environment. The required testing has succeeded and you want to create a new project to serve as your production environment. What should you do?

A. Use gcloud to create the new project, and then deploy your application to the new project.

- B. Use gcloud to create the new project and to copy the deployed application to the new project.
- C. Create a Deployment Manager configuration file that copies the current App Engine deployment into a new project.
- D. Deploy your application again using gcloud and specify the project parameter with the new project name to create the new project.

# **Explanation/Reference:**

#### **QUESTION 15**

You want to send and consume Cloud Pub/Sub messages from your App Engine application. The Cloud Pub/Sub API is currently disabled. You will use a service account to authenticate your application to the API. You want to make sure your application can use Cloud Pub/Sub. What should you do?

- A. Enable the Cloud Pub/Sub API in the API Library on the GCP Console.
- B. Rely on the automatic enablement of the Cloud Pub/Sub API when the Service Account accesses it.
- C. Use Deployment Manager to deploy your application. Rely on the automatic enablement of all APIs used by the application being deployed.
- D. Grant the App Engine Default service account the role of Cloud Pub/Sub Admin. Have your application enable the API on the first connection to Cloud Pub/Sub.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 16**

You need to monitor resources that are distributed over different projects in Google Cloud Platform. You want to consolidate reporting under the same Stackdriver Monitoring dashboard. What should you do?

- A. Use Shared VPC to connect all projects, and link Stackdriver to one of the projects.
- B. For each project, create a Stackdriver account. In each project, create a service account for that project and grant it the role of Stackdriver Account Editor in all other projects.
- C. Configure a single Stackdriver account, and link all projects to the same account.
- D. Configure a single Stackdriver account for one of the projects. In Stackdriver, create a Group and add the other project names as criteria for that Group.

Correct Answer: D Section: (none)

## **Explanation**

# **Explanation/Reference:**

#### **QUESTION 17**

You are deploying an application to a Compute Engine VM in a managed instance group. The application must be running at all times, but only a single instance of the VM should run per GCP project. How should you configure the instance group?

- A. Set autoscaling to On, set the minimum number of instances to 1, and then set the maximum number of instances to 1.
- B. Set autoscaling to Off, set the minimum number of instances to 1, and then set the maximum number of instances to 1.
- C. Set autoscaling to On, set the minimum number of instances to 1, and then set the maximum number of instances to 2.
- D. Set autoscaling to Off, set the minimum number of instances to 1, and then set the maximum number of instances to 2.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 18**

You want to verify the IAM users and roles assigned within a GCP project named my-project. What should you do?

- A. Run gcloud iam roles list. Review the output section.
- B. Run gcloud iam service-accounts list. Review the output section.
- C. Navigate to the project and then to the IAM section in the GCP Console. Review the members and roles.
- D. Navigate to the project and then to the Roles section in the GCP Console. Review the roles and status.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 19**

You need to create a new billing account and then link it with an existing Google Cloud Platform project. What should you do?

- A. Verify that you are Project Billing Manager for the GCP project. Update the existing project to link it to the existing billing account.
- B. Verify that you are Project Billing Manager for the GCP project. Create a new billing account and link the new billing account to the existing project.
- C. Verify that you are Billing Administrator for the billing account. Create a new project and link the new project to the existing billing account.
- D. Verify that you are Billing Administrator for the billing account. Update the existing project to link it to the existing billing account.

# **Explanation/Reference:**

Reference: https://cloud.google.com/billing/docs/how-to/modify-project

## **QUESTION 20**

You have an instance group that you want to load balance. You want the load balancer to terminate the client SSL session. The instance group is used to serve a public web application over HTTPS. You want to follow Google-recommended practices. What should you do?

- A. Configure an HTTP(S) load balancer.
- B. Configure an internal TCP load balancer.
- C. Configure an external SSL proxy load balancer.
- D. Configure an external TCP proxy load balancer.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Reference: <a href="https://cloud.google.com/load-balancing/docs/https/">https://cloud.google.com/load-balancing/docs/https/</a>

#### **QUESTION 21**

You have 32 GB of data in a single file that you need to upload to a Nearline Storage bucket. The WAN connection you are using is rated at 1 Gbps, and you are the only one on the connection. You want to use as match of the rated 1 Gbps as possible to transfer the file rapidly. How should you upload the file?

- A. Use the GCP Console to transfer the file instead of gsutil.
- B. Enable parallel composite uploads using gsutil on the file transfer.
- C. Decrease the TCP window size on the machine initiating the transfer.
- D. Change the storage class of the bucket from Nearline to Multi-Regional.

**Correct Answer:** B

Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 22**

You've deployed a microservice called myapp1 to a Google Kubernetes Engine cluster using the YAML file specified below:

```
apiVersion: apps/v1
kind: Deployment
metadata:
 name: myapp1-deployment
spec:
  selector:
   matchLabels:
      app: myappl
  replicas: 2
  template:
    metadata:
      labels:
        app: myapp1
    spec:
      containers:
      - name: main-container
        image: gcr.io/my-company-repo/myapp1:1.4
        env:
        - name: DB PASSWORD
          value: "t0ugh2guess!"
        ports:
        - containerPort: 8080
```

You need to refactor this configuration so that the database password is not stored in plain text. You want to follow Google-recommended practices. What should you do?

A. Store the database password inside the Docker image of the container, not in the YAML file.

- B. Store the database password inside a Secret object. Modify the YAML file to populate the DB PASSWORD environment variable from the Secret.
- C. Store the database password inside a ConfigMap object. Modify the YAML file to populate the DB\_PASSWORD environment variable from the ConfigMap.
- D. Store the database password in a file inside a Kubernetes persistent volume, and use a persistent volume claim to mount the volume to the container.

# **Explanation/Reference:**

## **QUESTION 23**

You need to select and configure compute resources for a set of batch processing jobs. These jobs take around 2 hours to complete and are run nightly. You want to minimize service costs. What should you do?

- A. Select Google Kubernetes Engine. Use a single-node culster with a small instance type.
- B. Select Google Kubernetes Engine. Use a three-node cluster with micro instance type.
- C. Select Compute Engine. Use preemptible VM instances of the appropriate standard machine type.
- D. Select Compute Engine. Use VM instance types that support micro bursting.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

#### **QUESTION 24**

You recently deployed a new version of an application to App Engine and then discovered a bug in the release. You need to immediately revert to the prior version of the application. What should you do?

- A. Run gcloud app restore.
- B. On the App Engine page of the GCP Console, select the application that needs to be reverted and click Revert.
- C. On the App Engine Versions page of the GCP Console, route 100% of the traffic to the previous version.
- D. Deploy the original version as a separate application. Then go to App Engine settings and split traffic between applications so that the original version serves 100% of the requests.

Correct Answer: D Section: (none)

# **Explanation**

**Explanation/Reference:**Reference: <a href="https://medium.com/google-cloud/app-engine-project-cleanup-9647296e796a">https://medium.com/google-cloud/app-engine-project-cleanup-9647296e796a</a>

