Google

Exam Questions Associate-Cloud-Engineer

Google Cloud Certified - Associate Cloud Engineer

NEW QUESTION 1
You create a new Google Kubernetes Engine (GKE) cluster and want to make sure that it always runs a supported and stable version of Kubernetes. What should you do?

A. Enable the Node Auto-Repair feature for your GKE cluster.
B. Enable the Node Auto-Upgrades feature for your GKE cluster.
C. Select the latest available cluster version for your GKE cluster.
D. Select “Container-Optimized OS (cos)” as a node image for your GKE cluster.

Answer: B

Explanation:
Creating or upgrading a cluster by specifying the version as latest does not provide automatic upgrades. Enable node auto-upgrades to ensure that the nodes in your cluster are up-to-date with the latest stable version.
https://cloud.google.com/kubernetes-engine/versioning-and-upgrades
Node auto-upgrades help you keep the nodes in your cluster up to date with the cluster master version when your master is updated on your behalf. When you create a new cluster or node pool with Google Cloud Console or the gcloud command, node auto-upgrade is enabled by default.
Ref: https://cloud.google.com/kubernetes-engine/docs/how-to/node-auto-upgrades

NEW QUESTION 2
You have experimented with Google Cloud using your own credit card and expensed the costs to your company. Your company wants to streamline the billing process and charge the costs of your projects to their monthly invoice. What should you do?

A. Grant the financial team the IAM role of €Billing Account User€ on the billing account linked to your credit card.
B. Set up BigQuery billing export and grant your financial department IAM access to query the data.
C. Create a ticket with Google Billing Support to ask them to send the invoice to your company.
D. Change the billing account of your projects to the billing account of your company.

Answer: D

NEW QUESTION 3
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.

Answer: B

Explanation:
Managed instance groups offer autoscaling capabilities that let you automatically add or delete instances from a managed instance group based on increases or decreases in load (CPU Utilization in this case). Autoscaling helps your apps gracefully handle increases in traffic and reduce costs when the need for resources is lower. You define the autoscaling policy and the autoscaler performs automatic scaling based on the measured load (CPU Utilization in this case). Autoscaling works by adding more instances to your instance group when there is more load (upscaling), and deleting instances when the need for instances is lowered (downscaling). Ref: https://cloud.google.com/compute/docs/autoscaler

NEW QUESTION 4
You have an object in a Cloud Storage bucket that you want to share with an external company. The object contains sensitive data. You want access to the content to be removed after four hours. The external company does not have a Google account to which you can grant specific user-based access privileges. You want to use the most secure method that requires the fewest steps. What should you do?

A. Create a signed URL with a four-hour expiration and share the URL with the company.
B. Set object access to ‘public’ and use object lifecycle management to remove the object after four hours.
C. Configure the storage bucket as a static website and furnish the object’s URL to the compan
D. Delete the object from the storage bucket after four hours.
E. Create a new Cloud Storage bucket specifically for the external company to acces
F. Copy the object to that bucke
G. Delete the bucket after four hours have passed.

Answer: A

Explanation:
Signed URLs are used to give time-limited resource access to anyone in possession of the URL, regardless of whether they have a Google account.
https://cloud.google.com/storage/docs/access-control/signed-urls

NEW QUESTION 5
You received a JSON file that contained a private key of a Service Account in order to get access to several resources in a Google Cloud project. You downloaded and installed the Cloud SDK and want to use this private key for authentication and authorization when performing gcloud commands. What should you do?

A. Use the command gcloud auth login and point it to the private key
B. Use the command gcloud auth activate-service-account and point it to the private key
C. Place the private key file in the installation directory of the Cloud SDK and rename it to "credentials ison"
D. Place the private key file in your home directory and rename it to ‘’GOOGLE_APPUCATION_CREDENTiALS".

Answer: B

Explanation:
Authorizing with a service account
gcloud auth activate-service-account authorizes access using a service account. As with gcloud init and gcloud auth login, this command saves the service account credentials to the local system on successful completion and sets the specified account as the active account in your Cloud SDK configuration.
https://cloud.google.com/sdk/docs/authorizing#authorizing_with_a_service_account

NEW QUESTION 6
You are operating a Google Kubernetes Engine (GKE) cluster for your company where different teams can run non-production workloads. Your Machine Learning (ML) team needs access to Nvidia Tesla P100 GPUs to train their models. You want to minimize effort and cost. What should you do?

A. Ask your ML team to add the “accelerator: gpu” annotation to their pod specification.
B. Recreate all the nodes of the GKE cluster to enable GPUs on all of them.
C. Create your own Kubernetes cluster on top of Compute Engine with nodes that have GPU
D. Dedicate this cluster to your ML team.
E. Add a new, GPU-enabled, node pool to the GKE cluste
F. Ask your ML team to add the cloud.google.com/gke -accelerator: nvidia-tesla-p100 nodeSelector to their pod specification.

Answer: D

Explanation:
This is the most optimal solution. Rather than recreating all nodes, you create a new node pool with GPU enabled. You then modify the pod specification to target particular GPU types by adding node selector to your workloads Pod specification. YOu still have a single cluster so you pay Kubernetes cluster management fee for just one cluster thus minimizing the
cost.Ref: https://cloud.google.com/kubernetes-engine/docs/how-to/gpusRef: https://cloud.google.com/kubern
Example:
- apiVersion: v1
- kind: Pod
- metadata:
- name: my-gpu-pod
- spec:
- containers:
- name: my-gpu-container
- image: nvidia/cuda:10.0-runtime-ubuntu18.04
- command: [/bin/bash]
- resources:
- limits:
- nvidia.com/gpu: 2
- nodeSelector:
- cloud.google.com/gke-accelerator: nvidia-tesla-k80 # or nvidia-tesla-p100 or nvidia-tesla-p4 or nvidia-tesla-v100 or nvidia-tesla-t4

NEW QUESTION 7
You are creating a Google Kubernetes Engine (GKE) cluster with a cluster autoscaler feature enabled. You need to make sure that each node of the cluster will run a monitoring pod that sends container metrics to a third-party monitoring solution. What should you do?

A. Deploy the monitoring pod in a StatefulSet object.
B. Deploy the monitoring pod in a DaemonSet object.
C. Reference the monitoring pod in a Deployment object.
D. Reference the monitoring pod in a cluster initializer at the GKE cluster creation time.

Answer: B

Explanation:
https://cloud.google.com/kubernetes-engine/docs/concepts/daemonset https://cloud.google.com/kubernetes-engine/docs/concepts/daemonset#usage_patterns
DaemonSets attempt to adhere to a one-Pod-per-node model, either across the entire cluster or a subset of nodes. As you add nodes to a node pool, DaemonSets automatically add Pods to the new nodes as needed.
In GKE, DaemonSets manage groups of replicated Pods and adhere to a one-Pod-per-node model, either across the entire cluster or a subset of nodes. As you add nodes to a node pool, DaemonSets automatically add Pods to the new nodes as needed. So, this is a perfect fit for our monitoring pod.
Ref: https://cloud.google.com/kubernetes-engine/docs/concepts/daemonset
DaemonSets are useful for deploying ongoing background tasks that you need to run on all or certain nodes, and which do not require user intervention. Examples of such tasks include storage daemons like ceph, log collection daemons like fluentd, and node monitoring daemons like collectd. For example, you could have DaemonSets for each type of daemon run on all of your nodes. Alternatively, you could run multiple DaemonSets for a single type of daemon, but have them use different configurations for different hardware types and resource needs.

NEW QUESTION 8
Your company uses BigQuery for data warehousing. Over time, many different business units in your
company have created 1000+ datasets across hundreds of projects. Your CIO wants you to examine all datasets to find tables that contain an employee_ssn column. You want to minimize effort in performing this task. What should you do?

A. Go to Data Catalog and search for employee_ssn in the search box.
B. Write a shell script that uses the bq command line tool to loop through all the projects in your organization.
C. Write a script that loops through all the projects in your organization and runs a query on INFORMATION_SCHEMA.COLUMNS view to find the employee_ssn column.
D. Write a Cloud Dataflow job that loops through all the projects in your organization and runs a query on INFORMATION_SCHEMA.COLUMNS view to find

employee_ssn column.

Answer: A

Explanation:
https://cloud.google.com/bigquery/docs/quickstarts/quickstart-web-ui?authuser=4

NEW QUESTION 9
You have been asked to create robust Virtual Private Network (VPN) connectivity between a new Virtual Private Cloud (VPC) and a remote site. Key requirements include dynamic routing, a shared address space of 10.19.0.1/22, and no overprovisioning of tunnels during a failover event. You want to follow Google-recommended practices to set up a high availability Cloud VPN. What should you do?

A. Use a custom mode VPC network, configure static routes, and use active/passive routing
B. Use an automatic mode VPC network, configure static routes, and use active/active routing
C. Use a custom mode VPC network use Cloud Router border gateway protocol (86P) routes, and use active/passive routing
D. Use an automatic mode VPC network, use Cloud Router border gateway protocol (BGP) routes and configure policy-based routing

Answer: C

Explanation:
https://cloud.google.com/network-connectivity/docs/vpn/concepts/best-practices

NEW QUESTION 10
You need to create a custom VPC with a single subnet. The subnet's range must be as large as possible. Which range should you use?

A. .00.0.0/0
B. 10.0.0.0/8
C. 172.16.0.0/12
D. 192.168.0.0/16

Answer: B

Explanation:
https://cloud.google.com/vpc/docs/vpc#manually_created_subnet_ip_ranges

NEW QUESTION 10
You are creating an application that will run on Google Kubernetes Engine. You have identified MongoDB as the most suitable database system for your application and want to deploy a managed MongoDB environment that provides a support SLA. What should you do?

A. Create a Cloud Bigtable cluster and use the HBase API
B. Deploy MongoDB Alias from the Google Cloud Marketplace
C. Download a MongoDB installation package and run it on Compute Engine instances
D. Download a MongoDB installation package, and run it on a Managed Instance Group

Answer: B

Explanation:
https://console.cloud.google.com/marketplace/details/gc-launcher-for-mongodb-atlas/mongodb-atlas

NEW QUESTION 12
Your management has asked an external auditor to review all the resources in a specific project. The security team has enabled the Organization Policy called Domain Restricted Sharing on the organization node by specifying only your Cloud Identity domain. You want the auditor to only be able to view, but not modify, the resources in that project. What should you do?

A. Ask the auditor for their Google account, and give them the Viewer role on the project.
B. Ask the auditor for their Google account, and give them the Security Reviewer role on the project.
C. Create a temporary account for the auditor in Cloud Identity, and give that account the Viewer role on the project.
D. Create a temporary account for the auditor in Cloud Identity, and give that account the Security Reviewer role on the project.

Answer: C

Explanation:
Using primitive roles The following table lists the primitive roles that you can grant to access a project, the description of what the role does, and the permissions bundled within that role. Avoid using primitive roles except when absolutely necessary. These roles are very powerful, and include a large number of permissions across all Google Cloud services. For more details on when you should use primitive roles, see the Identity and Access Management FAQ. IAM predefined roles are much more granular, and allow you to carefully manage the set of permissions that your users have access to. See Understanding Roles for a list of roles that can be granted at the project level. Creating custom roles can further increase the control you have over user permissions. https://cloud.google.com/resource-manager/docs/access-control-proj#using_primitive_roles
https://cloud.google.com/iam/docs/understanding-custom-roles

NEW QUESTION 13
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.

Answer: D

Explanation:
"...we recommend that you enable Cloud Billing data export to BigQuery at the same time that you create a Cloud Billing account. "
https://cloud.google.com/billing/docs/how-to/export-data-bigquery
https://medium.com/google-cloud/analyzing-google-cloud-billing-data-with-big-query-30bae1c2aae4

NEW QUESTION 18
You created a Kubernetes deployment by running kubectl run nginx image=nginx replicas=1. After a few days, you decided you no longer want this deployment. You identified the pod and deleted it by running kubectl delete pod. You noticed the pod got recreated.

- $ kubectl get pods
- NAME READY STATUS RESTARTS AGE
- nginx-84748895c4-nqqmt 1/1 Running 0 9m41s
- $ kubectl delete pod nginx-84748895c4-nqqmt
- pod nginx-84748895c4-nqqmt deleted
- $ kubectl get pods
- NAME READY STATUS RESTARTS AGE
- nginx-84748895c4-k6bzl 1/1 Running 0 25s

What should you do to delete the deployment and avoid pod getting recreated?

A. kubectl delete deployment nginx
B. kubectl delete –deployment=nginx
C. kubectl delete pod nginx-84748895c4-k6bzl –no-restart 2
D. kubectl delete inginx

Answer: A

Explanation:
This command correctly deletes the deployment. Pods are managed by kubernetes workloads (deployments). When a pod is deleted, the deployment detects the pod is unavailable and brings up another pod to maintain the replica count. The only way to delete the workload is by deleting the deployment itself using the kubectl delete deployment command.

- $ kubectl delete deployment nginx
- deployment.apps nginx deleted

Ref: https://kubernetes.io/docs/reference/kubectl/cheatsheet/#deleting-resources

NEW QUESTION 22
You have a large 5-TB AVRO file stored in a Cloud Storage bucket. Your analysts are proficient only in SQL and need access to the data stored in this file. You want to find a cost-effective way to complete their request as soon as possible. What should you do?

A. Load data in Cloud Datastore and run a SQL query against it.
B. Create a BigQuery table and load data in BigQuer
C. Run a SQL query on this table and drop this table after you complete your request.
D. Create external tables in BigQuery that point to Cloud Storage buckets and run a SQL query on these external tables to complete your request.
E. Create a Hadoop cluster and copy the AVRO file to NDFS by compressing i
F. Load the file in a hive table and provide access to your analysts so that they can run SQL queries.

Answer: C

Explanation:
https://cloud.google.com/bigquery/external-data-sources
An external data source is a data source that you can query directly from BigQuery, even though the data is not stored in BigQuery storage.
BigQuery supports the following external data sources: Amazon S3
Azure Storage Cloud Bigtable Cloud Spanner Cloud SQL Cloud Storage Drive

NEW QUESTION 26
You are asked to set up application performance monitoring on Google Cloud projects A, B, and C as a single pane of glass. You want to monitor CPU, memory, and disk. What should you do?

A. Enable API and then share charts from project A, B, and C.
B. Enable API and then give the metrics.reader role to projects A, B, and C.
C. Enable API and then use default dashboards to view all projects in sequence.
D. Enable API, create a workspace under project A, and then add project B and C.

Answer: D

Explanation:
https://cloud.google.com/monitoring/settings/multiple-projects https://cloud.google.com/monitoring/workspaces

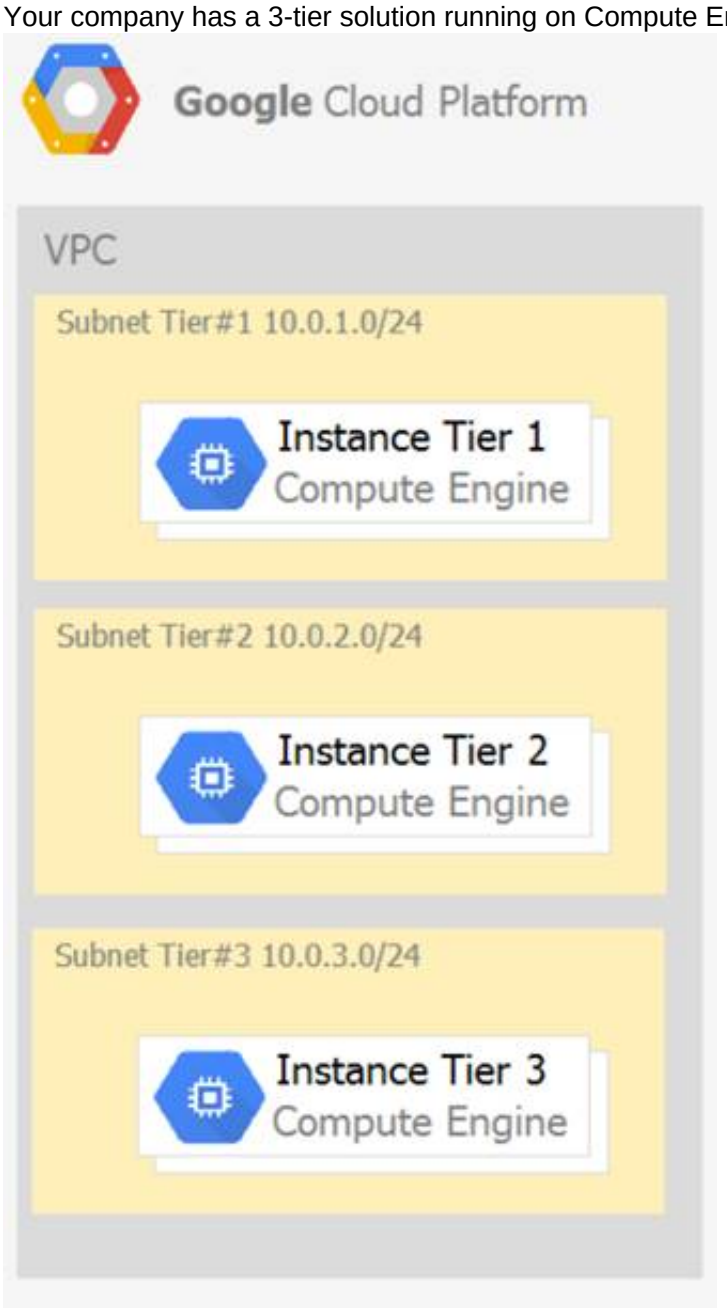
NEW QUESTION 30
Your company set up a complex organizational structure on Google Could Platform. The structure includes hundreds of folders and projects. Only a few team members should be able to view the hierarchical structure. You need to assign minimum permissions to these team members and you want to follow Google-recommended practices. What should you do?

A. Add the users to roles/browser role.
B. Add the users to roles/iam.roleViewer role.
C. Add the users to a group, and add this group to roles/browser role.
D. Add the users to a group, and add this group to roles/iam.roleViewer role.

Answer: C

Explanation:
We need to apply the GCP Best practices. roles/browser Browser Read access to browse the hierarchy for a project, including the folder, organization, and IAM policy. This role doesn't include permission to view resources in the project. https://cloud.google.com/iam/docs/understanding-roles

NEW QUESTION 34
Your company has a 3-tier solution running on Compute Engine. The configuration of the current infrastructure is shown below.



Each tier has a service account that is associated with all instances within it. You need to enable communication on TCP port 8080 between tiers as follows:
• Instances in tier #1 must communicate with tier #2.
• Instances in tier #2 must communicate with tier #3. What should you do?

A. 1. Create an ingress firewall rule with the following settings:• Targets: all instances• Source filter: IP ranges (with the range set to 10.0.2.0/24)• Protocols: allow all2. Create an ingress firewall rule with the following settings:• Targets: all instances• Source filter: IP ranges (with the range set to 10.0.1.0/24)•Protocols: allow all
B. 1. Create an ingress firewall rule with the following settings:• Targets: all instances with tier #2 service account• Source filter: all instances with tier #1 service account• Protocols: allow TCP:80802. Create an ingress firewall rule with the following settings:• Targets: all instances with tier #3 service account• Source filter: all instances with tier #2 service account• Protocols: allow TCP: 8080
C. 1. Create an ingress firewall rule with the following settings:• Targets: all instances with tier #2 service account• Source filter: all instances with tier #1 service account• Protocols: allow all2. Create an ingress firewall rule with the following settings:• Targets: all instances with tier #3 service account• Source filter: all instances with tier #2 service account• Protocols: allow all
D. 1. Create an egress firewall rule with the following settings:• Targets: all instances• Source filter: IP ranges (with the range set to 10.0.2.0/24)• Protocols: allow TCP: 80802. Create an egress firewall rule with the following settings:• Targets: all instances• Source filter: IP ranges (with the range set to 10.0.1.0/24)• Protocols: allow TCP: 8080

Answer: B

Explanation:
* 1. Create an ingress firewall rule with the following settings: "¢ Targets: all instances with tier #2 service account "¢ Source filter: all instances with tier #1 service account "¢ Protocols: allow TCP:8080 2. Create an ingress firewall rule with the following settings: "¢ Targets: all instances with tier #3 service account "¢ Source filter: all instances with tier #2 service account "¢ Protocols: allow TCP: 8080

NEW QUESTION 37
You have a Dockerfile that you need to deploy on Kubernetes Engine. What should you do?

A. Use kubectl app deploy <dockerfilename>.
B. Use gcloud app deploy <dockerfilename>.
C. Create a docker image from the Dockerfile and upload it to Container Registr
D. Create a Deployment YAML file to point to that imag

E. Use kubectl to create the deployment with that file.
F. Create a docker image from the Dockerfile and upload it to Cloud Storag
G. Create a Deployment YAML file to point to that imag
H. Use kubectl to create the deployment with that file.

Answer: C

NEW QUESTION 39
You are hosting an application on bare-metal servers in your own data center. The application needs access to Cloud Storage. However, security policies prevent the servers hosting the application from having public IP addresses or access to the internet. You want to follow Google-recommended practices to provide the application with access to Cloud Storage. What should you do?

A. 1. Use nslookup to get the IP address for storage.googleapis.com.2. Negotiate with the security team to be able to give a public IP address to the servers.3. Only allow egress traffic from those servers to the IP addresses for storage.googleapis.com.
B. 1. Using Cloud VPN, create a VPN tunnel to a Virtual Private Cloud (VPC) in Google Cloud Platform (GCP).2. In this VPC, create a Compute Engine instance and install the Squid proxy server on this instance.3. Configure your servers to use that instance as a proxy to access Cloud Storage.
C. 1. Use Migrate for Compute Engine (formerly known as Velostrata) to migrate those servers to Compute Engine.2. Create an internal load balancer (ILB) that uses storage.googleapis.com as backend.3. Configure your new instances to use this ILB as proxy.
D. 1. Using Cloud VPN or Interconnect, create a tunnel to a VPC in GCP.2. Use Cloud Router to create a custom route advertisement for 199.36.153.4/30. Announce that network to your on-premises network through the VPN tunnel.3. In your on-premises network, configure your DNS server to resolve*.googleapis.com as a CNAME to restricted.googleapis.com.

Answer: D

Explanation:
Our requirement is to follow Google recommended practices to achieve the end result. Configuring Private Google Access for On-Premises Hosts is best achieved by VPN/Interconnect + Advertise Routes + Use restricted Google IP Range.

- Using Cloud VPN or Interconnect, create a tunnel to a VPC in GCP
- Using Cloud Router to create a custom route advertisement for 199.36.153.4/30. Announce that network to your on-premises network through the VPN tunnel.
- In your on-premises network, configure your DNS server to resolve *.googleapis.com as a CNAME to restricted.googleapis.com is the right answer right, and it is what Google recommends.

Ref: https://cloud.google.com/vpc/docs/configure-private-google-access-hybrid

- You must configure routes so that Google API traffic is forwarded through your Cloud VPN or Cloud Interconnect connection, firewall rules on your on-premises firewall to allow the outgoing traffic, and DNS so that traffic to Google APIs resolves to the IP range youve added to your routes.
- You can use Cloud Router Custom Route Advertisement to announce the Restricted Google APIs IP addresses through Cloud Router to your on-premises network.

The Restricted Google APIs IP range is 199.36.153.4/30. While this is technically a public IP range, Google does not announce it publicly. This IP range is only accessible to hosts that can reach your Google Cloud projects through internal IP ranges, such as through a Cloud VPN or Cloud Interconnect connection. Without having a public IP address or access to the internet, the only way you could connect to cloud storage is if you have an internal route to it.

- So Negotiate with the security team to be able to give public IP addresses to the servers is not right.

Following Google recommended practices is synonymous with using Googles services (Not quite, but it is at least for the exam !!).

- So In this VPC, create a Compute Engine instance and install the Squid proxy server on this instance is not right.
- Migrating the VM to Compute Engine is a bit drastic when Google says it is perfectly fine to have Hybrid Connectivity architectures https://cloud.google.com/hybrid-connectivity.

So,

- Use Migrate for Compute Engine (formerly known as Velostrata) to migrate these servers to Compute Engine is not right.

NEW QUESTION 43
You are the team lead of a group of 10 developers. You provided each developer with an individual Google Cloud Project that they can use as their personal sandbox to experiment with different Google Cloud solutions. You want to be notified if any of the developers are spending above $500 per month on their sandbox environment. What should you do?

A. Create a single budget for all projects and configure budget alerts on this budget.
B. Create a separate billing account per sandbox project and enable BigQuery billing export
C. Create a Data Studio dashboard to plot the spending per billing account.
D. Create a budget per project and configure budget alerts on all of these budgets.
E. Create a single billing account for all sandbox projects and enable BigQuery billing export
F. Create a Data Studio dashboard to plot the spending per project.

Answer: C

Explanation:
Set budgets and budget alerts Overview Avoid surprises on your bill by creating Cloud Billing budgets to monitor all of your Google Cloud charges in one place. A budget enables you to track your actual Google Cloud spend against your planned spend. After you've set a budget amount, you set budget alert threshold rules that are used to trigger email notifications. Budget alert emails help you stay informed about how your spend is tracking against your budget. 2. Set budget scope Set the budget Scope and then click Next. In the Projects field, select one or more projects that you want to apply the budget alert to. To apply the budget alert to all the projects in the Cloud Billing account, choose Select all.
https://cloud.google.com/billing/docs/how-to/budgets#budget-scop

NEW QUESTION 48
You need to immediately change the storage class of an existing Google Cloud bucket. You need to reduce service cost for infrequently accessed files stored in that bucket and for all files that will be added to that bucket in the future. What should you do?

A. Use the gsutil to rewrite the storage class for the bucket Change the default storage class for the bucket
B. Use the gsutil to rewrite the storage class for the bucket Set up Object Lifecycle management on the bucket
C. Create a new bucket and change the default storage class for the bucket Set up Object Lifecycle management on lite bucket
D. Create a new bucket and change the default storage class for the bucket import the files from the previous bucket into the new bucket

Answer: B

NEW QUESTION 52
You have a number of applications that have bursty workloads and are heavily dependent on topics to decouple publishing systems from consuming systems. Your company would like to go serverless to enable developers to focus on writing code without worrying about infrastructure. Your solution architect has already identified Cloud Pub/Sub as a suitable alternative for decoupling systems. You have been asked to identify a suitable GCP Serverless service that is easy to use with Cloud Pub/Sub. You want the ability to scale down to zero when there is no traffic in order to minimize costs. You want to follow Google recommended practices. What should you suggest?

A. Cloud Run for Anthos
B. Cloud Run
C. App Engine Standard
D. Cloud Functions.

Answer: D

Explanation:
Cloud Functions is Google Cloud's event-driven serverless compute platform that lets you run your code locally or in the cloud without having to provision servers. Cloud Functions scales up or down, so you pay only for compute resources you use. Cloud Functions have excellent integration with Cloud Pub/Sub, lets you scale down to zero and is recommended by Google as the ideal serverless platform to use when dependent on Cloud Pub/Sub."If you're building a simple API (a small set of functions to be accessed via HTTP or Cloud Pub/Sub), we recommend using Cloud Functions."Ref: https://cloud.google.com/serverless-options

NEW QUESTION 54
Your organization is a financial company that needs to store audit log files for 3 years. Your organization has hundreds of Google Cloud projects. You need to implement a cost-effective approach for log file retention. What should you do?

A. Create an export to the sink that saves logs from Cloud Audit to BigQuery.
B. Create an export to the sink that saves logs from Cloud Audit to a Coldline Storage bucket.
C. Write a custom script that uses logging API to copy the logs from Stackdriver logs to BigQuery.
D. Export these logs to Cloud Pub/Sub and write a Cloud Dataflow pipeline to store logs to Cloud SQL.

Answer: B

Explanation:
Coldline Storage is the perfect service to store audit logs from all the projects and is very cost-efficient as well. Coldline Storage is a very low-cost, highly durable storage service for storing infrequently accessed data.

NEW QUESTION 55
You deployed an LDAP server on Compute Engine that is reachable via TLS through port 636 using UDP. You want to make sure it is reachable by clients over that port. What should you do?

A. Add the network tag allow-udp-636 to the VM instance running the LDAP server.
B. Create a route called allow-udp-636 and set the next hop to be the VM instance running the LDAP server.
C. Add a network tag of your choice to the instanc
D. Create a firewall rule to allow ingress on UDP port 636 for that network tag.
E. Add a network tag of your choice to the instance running the LDAP serve
F. Create a firewall rule to allow egress on UDP port 636 for that network tag.

Answer: C

Explanation:
A tag is simply a character string added to a tags field in a resource, such as Compute Engine virtual machine (VM) instances or instance templates. A tag is not a separate resource, so you cannot create it separately. All resources with that string are considered to have that tag. Tags enable you to make firewall rules and routes applicable to specific VM instances.

NEW QUESTION 56
Your company has an internal application for managing transactional orders. The application is used exclusively by employees in a single physical location. The application requires strong consistency, fast queries, and ACID guarantees for multi-table transactional updates. The first version of the application is implemented inPostgreSQL, and you want to deploy it to the cloud with minimal code changes. Which database is most appropriate for this application?

A. BigQuery
B. Cloud SQL
C. Cloud Spanner
D. Cloud Datastore

Answer: B

Explanation:
https://cloud.google.com/sql/docs/postgres

NEW QUESTION 60
You are developing a new application and are looking for a Jenkins installation to build and deploy your source code. You want to automate the installation as quickly and easily as possible. What should you do?

A. Deploy Jenkins through the Google Cloud Marketplace.
B. Create a new Compute Engine instanc
C. Run the Jenkins executable.

D. Create a new Kubernetes Engine cluste
E. Create a deployment for the Jenkins image.
F. Create an instance template with the Jenkins executabl
G. Create a managed instance group with this template.

Answer: A

Explanation:
Installing Jenkins
In this section, you use Cloud Marketplace to provision a Jenkins instance. You customize this instance to use the agent image you created in the previous section.
Go to the Cloud Marketplace solution for Jenkins. Click Launch on Compute Engine.
Change the Machine Type field to 4 vCPUs 15 GB Memory, n1-standard-4. Machine type selection for Jenkins deployment.
Click Deploy and wait for your Jenkins instance to finish being provisioned. When it is finished, you will see: Jenkins has been deployed.
https://cloud.google.com/solutions/using-jenkins-for-distributed-builds-on-compute-engine#installing_jenkins

NEW QUESTION 65
Your company's infrastructure is on-premises, but all machines are running at maximum capacity. You want to burst to Google Cloud. The workloads on Google Cloud must be able to directly communicate to the workloads on-premises using a private IP range. What should you do?

A. In Google Cloud, configure the VPC as a host for Shared VPC.
B. In Google Cloud, configure the VPC for VPC Network Peering.
C. Create bastion hosts both in your on-premises environment and on Google Clou
D. Configure both as proxy servers using their public IP addresses.
E. Set up Cloud VPN between the infrastructure on-premises and Google Cloud.

Answer: D

Explanation:
"Google Cloud VPC Network Peering allows internal IP address connectivity across two Virtual Private Cloud (VPC) networks regardless of whether they belong to the same project or the same organization."
https://cloud.google.com/vpc/docs/vpc-peering while
"Cloud Interconnect provides low latency, high availability connections that enable you to reliably transfer data between your on-premises and Google Cloud Virtual Private Cloud (VPC) networks."
https://cloud.google.com/network-connectivity/docs/interconnect/concepts/overview
and "HA VPN is a high-availability (HA) Cloud VPN solution that lets you securely connect your on-premises network to your VPC network through an IPsec VPN connection in a single region."
https://cloud.google.com/network-connectivity/docs/vpn/concepts/overview

NEW QUESTION 66
You are storing sensitive information in a Cloud Storage bucket. For legal reasons, you need to be able to record all requests that read any of the stored data. You want to make sure you comply with these requirements. What should you do?

A. Enable the Identity Aware Proxy API on the project.
B. Scan the bucker using the Data Loss Prevention API.
C. Allow only a single Service Account access to read the data.
D. Enable Data Access audit logs for the Cloud Storage API.

Answer: D

Explanation:
Logged information Within Cloud Audit Logs, there are two types of logs: Admin Activity logs: Entries for operations that modify the configuration or metadata of a project, bucket, or object. Data Access logs: Entries for operations that modify objects or read a project, bucket, or object. There are several sub-types of data access logs: ADMIN_READ: Entries for operations that read the configuration or metadata of a project, bucket, or object. DATA_READ: Entries for operations that read an object. DATA_WRITE: Entries for operations that create or modify an object. https://cloud.google.com/storage/docs/audit-logs#types

NEW QUESTION 71
You need to add a group of new users to Cloud Identity. Some of the users already have existing Google accounts. You want to follow one of Google's recommended practices and avoid conflicting accounts. What should you do?

A. Invite the user to transfer their existing account
B. Invite the user to use an email alias to resolve the conflict
C. Tell the user that they must delete their existing account
D. Tell the user to remove all personal email from the existing account

Answer: A

Explanation:
https://cloud.google.com/architecture/identity/migrating-consumer-accounts

NEW QUESTION 72
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 action
B. Set the SetStorageClass action to 90 days and the Delete action to 275 days (365 – 90)
C. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete action
D. Set the SetStorageClass action to 90 days and the Delete action to 365 days.
E. Use gsutil rewrite and set the Delete action to 275 days (365-90).

F. Use gsutil rewrite and set the Delete action to 365 days.

Answer: A

Explanation:
https://cloud.google.com/storage/docs/lifecycle#setstorageclass-cost
The object's time spent set at the original storage class counts towards any minimum storage duration that applies for the new storage class.

NEW QUESTION 75
You deployed an App Engine application using gcloud app deploy, but it did not deploy to the intended project. You want to find out why this happened and where the application deployed. What should you do?

A. Check the app.yaml file for your application and check project settings.
B. Check the web-application.xml file for your application and check project settings.
C. Go to Deployment Manager and review settings for deployment of applications.
D. Go to Cloud Shell and run gcloud config list to review the Google Cloud configuration used for deployment.

Answer: D

Explanation:
C:\GCP\appeng>gcloud config list [core]
account = xxx@gmail.com disable_usage_reporting = False project = my-first-demo-xxxx
https://cloud.google.com/endpoints/docs/openapi/troubleshoot-gce-deployment

NEW QUESTION 80
You have a web application deployed as a managed instance group. You have a new version of the application to gradually deploy. Your web application is currently receiving live web traffic. You want to ensure that the available capacity does not decrease during the deployment. What should you do?

A. Perform a rolling-action start-update with maxSurge set to 0 and maxUnavailable set to 1.
B. Perform a rolling-action start-update with maxSurge set to 1 and maxUnavailable set to 0.
C. Create a new managed instance group with an updated instance templat
D. Add the group to the backend service for the load balance
E. When all instances in the new managed instance group are healthy, delete the old managed instance group.
F. Create a new instance template with the new application versio
G. Update the existing managed instance group with the new instance templat
H. Delete the instances in the managed instance group to allow the managed instance group to recreate the instance using the new instance template.

Answer: B

Explanation:
https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups#max_

NEW QUESTION 82
You need to grant access for three users so that they can view and edit table data on a Cloud Spanner instance. What should you do?

A. Run gcloud iam roles describe roles/spanner.databaseUse
B. Add the users to the role.
C. Run gcloud iam roles describe roles/spanner.databaseUse
D. Add the users to a new grou
E. Add the group to the role.
F. Run gcloud iam roles describe roles/spanner.viewer --project my-projec
G. Add the users to the role.
H. Run gcloud iam roles describe roles/spanner.viewer --project my-projec
I. Add the users to a new group.Add the group to the role.

Answer: B

Explanation:
https://cloud.google.com/spanner/docs/iam#spanner.databaseUser
Using the gcloud tool, execute the gcloud iam roles describe roles/spanner.databaseUser command on Cloud Shell. Attach the users to a newly created Google group and add the group to the role.

NEW QUESTION 83
You are building an archival solution for your data warehouse and have selected Cloud Storage to archive your data. Your users need to be able to access this archived data once a quarter for some regulatory requirements. You want to select a cost-efficient option. Which storage option should you use?

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

Answer: A

Explanation:
Coldline Storage is a very-low-cost, highly durable storage service for storing infrequently accessed data. Coldline Storage is ideal for data you plan to read or modify at most once a quarter. Since we have a requirement to access data once a quarter and want to go with the most cost-efficient option, we should select Coldline Storage.
Ref: https://cloud.google.com/storage/docs/storage-classes#coldline

NEW QUESTION 86
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.

Answer: D

NEW QUESTION 89
You need to create a Compute Engine instance in a new project that doesn't exist yet. What should you do?

A. Using the Cloud SDK, create a new project, enable the Compute Engine API in that project, and then create the instance specifying your new project.
B. Enable the Compute Engine API in the Cloud Console, use the Cloud SDK to create the instance, and then use the —project flag to specify a new project.
C. Using the Cloud SDK, create the new instance, and use the —project flag to specify the new project.Answer yes when prompted by Cloud SDK to enable the Compute Engine API.
D. Enable the Compute Engine API in the Cloud Consol
E. Go to the Compute Engine section of the Console to create a new instance, and look for the Create In A New Project option in the creation form.

Answer: A

Explanation:
https://cloud.google.com/sdk/gcloud/reference/projects/create Quickstart: Creating a New Instance Using the Command Line Before you begin
* 1. In the Cloud Console, on the project selector page, select or create a Cloud project.
* 2. Make sure that billing is enabled for your Google Cloud project. Learn how to confirm billing is enabled for your project.
To use the gcloud command-line tool for this quickstart, you must first install and initialize the Cloud SDK:
* 1. Download and install the Cloud SDK using the instructions given on Installing Google Cloud SDK.
* 2. Initialize the SDK using the instructions given on Initializing Cloud SDK.
To use gcloud in Cloud Shell for this quickstart, first activate Cloud Shell using the instructions given on Starting Cloud Shell.
https://cloud.google.com/ai-platform/deep-learning-vm/docs/quickstart-cli#before-you-begin

NEW QUESTION 92
You need to manage a Cloud Spanner Instance for best query performance. Your instance in production runs in a single Google Cloud region. You need to improve performance in the shortest amount of time. You want
to follow Google best practices for service configuration. What should you do?

A. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 45% If you exceed this threshold, add nodes lo your instance.

B. Create an alert in Cloud Monitoring to alert when the percentage ot high priority CPU utilization reaches 45% Use database query statistics to identify queries that result in high CPU usage, and then rewrite those queries to optimize their resource usage
C. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 65% If you exceed this threshold, add nodes to your instance
D. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 65%. Use database query statistics to identity queries that result in high CPU usage, and then rewrite those queries to optimize their resource usage.

Answer: C

Explanation:
https://cloud.google.com/spanner/docs/cpu-utilization#recommended-max

NEW QUESTION 93
Your company has embraced a hybrid cloud strategy where some of the applications are deployed on Google Cloud. A Virtual Private Network (VPN) tunnel connects your Virtual Private Cloud (VPC) in Google Cloud with your company's on-premises network. Multiple applications in Google Cloud need to connect to an on-premises database server, and you want to avoid having to change the IP configuration in all of your applications when the IP of the database changes.
What should you do?

A. Configure Cloud NAT for all subnets of your VPC to be used when egressing from the VM instances.
B. Create a private zone on Cloud DNS, and configure the applications with the DNS name.
C. Configure the IP of the database as custom metadata for each instance, and query the metadata server.
D. Query the Compute Engine internal DNS from the applications to retrieve the IP of the database.

Answer: B

Explanation:
Forwarding zones Cloud DNS forwarding zones let you configure target name servers for specific private
zones. Using a forwarding zone is one way to implement outbound DNS forwarding from your VPC network. A Cloud DNS forwarding zone is a special type of Cloud DNS private zone. Instead of creating records within the zone, you specify a set of forwarding targets. Each forwarding target is an IP address of a DNS server, located in your VPC network, or in an on-premises network connected to your VPC network by Cloud VPN or Cloud Interconnect.
https://cloud.google.com/nat/docs/overview
DNS configuration Your on-premises network must have DNS zones and records configured so that Google domain names resolve to the set of IP addresses for either private.googleapis.com or restricted.googleapis.com. You can create Cloud DNS managed private zones and use a Cloud DNS inbound server policy, or you can configure on-premises name servers. For example, you can use BIND or Microsoft Active Directory DNS.
https://cloud.google.com/vpc/docs/configure-private-google-access-hybrid#config-domain

NEW QUESTION 97
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.

Answer: A

NEW QUESTION 99
You are developing a financial trading application that will be used globally. Data is stored and queried using a relational structure, and clients from all over the world should get the exact identical state of the data. The application will be deployed in multiple regions to provide the lowest latency to end users. You need to select a storage option for the application data while minimizing latency. What should you do?

A. Use Cloud Bigtable for data storage.
B. Use Cloud SQL for data storage.
C. Use Cloud Spanner for data storage.
D. Use Firestore for data storage.

Answer: C

Explanation:
Keywords, Financial data (large data) used globally, data stored and queried using relational structure (SQL), clients should get exact identical copies(Strong Consistency), Multiple region, low latency to end user, select storage option to minimize latency.

NEW QUESTION 103
You created several resources in multiple Google Cloud projects. All projects are linked to different billing accounts. To better estimate future charges, you want to have a single visual representation of all costs incurred. You want to include new cost data as soon as possible. What should you do?

A. Configure Billing Data Export to BigQuery and visualize the data in Data Studio.
B. Visit the Cost Table page to get a CSV export and visualize it using Data Studio.
C. Fill all resources in the Pricing Calculator to get an estimate of the monthly cost.
D. Use the Reports view in the Cloud Billing Console to view the desired cost information.

Answer: A

Explanation:
https://cloud.google.com/billing/docs/how-to/export-data-bigquery "Cloud Billing export to BigQuery enables you to export detailed Google Cloud billing data (such as usage, cost estimates, and pricing data) automatically throughout the day to a BigQuery dataset that you specify."

NEW QUESTION 104
You are given a project with a single virtual private cloud (VPC) and a single subnetwork in the us-central1 region. There is a Compute Engine instance hosting an application in this subnetwork. You need to deploy a new instance in the same project in the europe-west1 region. This new instance needs access to the application. You want to follow Google-recommended practices. What should you do?

A. 1. Create a subnetwork in the same VPC, in europe-west1.2. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.
B. 1. Create a VPC and a subnetwork in europe-west1.2. Expose the application with an internal load balancer.3. Create the new instance in the new subnetwork and use the load balancer's address as the endpoint.
C. 1. Create a subnetwork in the same VPC, in europe-west1.2. Use Cloud VPN to connect the two subnetworks.3. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.
D. 1. Create a VPC and a subnetwork in europe-west1.2. Peer the 2 VPCs.3. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.

Answer: C

Explanation:
Given that the new instance wants to access the application on the existing compute engine instance, these applications seem to be related so they should be within the same VPC. It is possible to have them in different VPCs and peer the VPCs but this is a lot of additional work and we can simplify this by choosing the option below (which is the answer)
* 1. Create a subnet in the same VPC, in europe-west1.
* 2. Create the new instance in the new subnet and use the first instance subnets private address as the endpoint. is the right answer.
We can create another subnet in the same VPC and this subnet is located in europe-west1. We can then spin up a new instance in this subnet. We also have to set up a firewall rule to allow communication between the two subnets. All instances in the two subnets with the same VPC can communicate through the internal IP Address
Ref: https://cloud.google.com/vpc

NEW QUESTION 107
Your company wants to standardize the creation and management of multiple Google Cloud resources using Infrastructure as Code. You want to minimize the amount of repetitive code needed to manage the environment What should you do?

A. Create a bash script that contains all requirement steps as gcloud commands
B. Develop templates for the environment using Cloud Deployment Manager
C. Use curl in a terminal to send a REST request to the relevant Google API for each individual resource.
D. Use the Cloud Console interface to provision and manage all related resources

Answer: B

Explanation:
You can use Google Cloud Deployment Manager to create a set of Google Cloud resources and manage them as a unit, called a deployment. For example, if your team's development environment needs two virtual machines (VMs) and a BigQuery database, you can define these resources in a configuration file, and use Deployment Manager to create, change, or delete these resources. You can make the configuration file part of your team's code repository, so that anyone can create the same environment with consistent results. https://cloud.google.com/deployment-manager/docs/quickstart

NEW QUESTION 109
You need to update a deployment in Deployment Manager without any resource downtime in the deployment. Which command should you use?

A. gcloud deployment-manager deployments create --config <deployment-config-path>
B. gcloud deployment-manager deployments update --config <deployment-config-path>
C. gcloud deployment-manager resources create --config <deployment-config-path>
D. gcloud deployment-manager resources update --config <deployment-config-path>

Answer: B

NEW QUESTION 114
You need to produce a list of the enabled Google Cloud Platform APIs for a GCP project using the gcloud command line in the Cloud Shell. The project name is my-project. What should you do?

A. Run gcloud projects list to get the project ID, and then run gcloud services list --project <project ID>.
B. Run gcloud init to set the current project to my-project, and then run gcloud services list --available.
C. Run gcloud info to view the account value, and then run gcloud services list --account <Account>.
D. Run gcloud projects describe <project ID> to verify the project value, and then run gcloud services list--available.

Answer: A

Explanation:
`gcloud services list --available` returns not only the enabled services in the project but also services that CAN be enabled.
https://cloud.google.com/sdk/gcloud/reference/services/list#--available
Run the following command to list the enabled APIs and services in your current project: gcloud services list
whereas, Run the following command to list the APIs and services available to you in your current project: gcloud services list –available
https://cloud.google.com/sdk/gcloud/reference/services/list#--available
--available
Return the services available to the project to enable. This list will include any services that the project has already enabled.
To list the services the current project has enabled for consumption, run: gcloud services list --enabled
To list the services the current project can enable for consumption, run: gcloud services list –available

NEW QUESTION 116
Your web application has been running successfully on Cloud Run for Anthos. You want to evaluate an updated version of the application with a specific

percentage of your production users (canary deployment). What should you do?

A. Create a new service with the new version of the applicatio
B. Split traffic between this version and the version that is currently running.
C. Create a new revision with the new version of the applicatio
D. Split traffic between this version and the version that is currently running.
E. Create a new service with the new version of the applicatio
F. Add an HTTP Load Balancer in front of both services.
G. Create a new revision with the new version of the applicatio
H. Add an HTTP Load Balancer in front of both revisions.

Answer: B

Explanation:
https://cloud.google.com/kuberun/docs/rollouts-rollbacks-traffic-migration

NEW QUESTION 121
You have a Google Cloud Platform account with access to both production and development projects. You need to create an automated process to list all compute instances in development and production projects on a daily basis. What should you do?

A. Create two configurations using gcloud confi
B. Write a script that sets configurations as active, individuall
C. For each configuration, use gcloud compute instances list to get a list of compute resources.
D. Create two configurations using gsutil confi
E. Write a script that sets configurations as active, individuall
F. For each configuration, use gsutil compute instances list to get a list of compute resources.
G. Go to Cloud Shell and export this information to Cloud Storage on a daily basis.
H. Go to GCP Console and export this information to Cloud SQL on a daily basis.

Answer: A

Explanation:
You can create two configurations – one for the development project and another for the production project. And you do that by running “gcloud config configurations create” command.https://cloud.google.com/sdk/gcloud/reference/config/configurations/createIn your custom script, you can load these configurations one at a time and execute gcloud compute instances list to list Google Compute Engine instances in the project that is active in the gcloud configuration.Ref: https://cloud.google.com/sdk/gcloud/reference/compute/instances/listOnce you have this information, you can export it in a suitable format to a suitable target e.g. export as CSV or export to Cloud Storage/BigQuery/SQL, etc

NEW QUESTION 126
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 deskto
B. Verify that a firewall rule for port 3389 exists.
C. Install a RDP client in your deskto
D. Set a Windows username and password in the GCP Consol
E. Use the credentials to log in to the instance.
F. Set a Windows password in the GCP Consol
G. Verify that a firewall rule for port 22 exist
H. Click the RDP button in the GCP Console and supply the credentials to log in.
I. Set a Windows username and password in the GCP Consol
J. Verify that a firewall rule for port 3389 exist
K. Click the RDP button in the GCP Console, and supply the credentials to log in.

Answer: D

Explanation:
https://cloud.google.com/compute/docs/instances/connecting-to-windows#remote-desktop-connection-app
https://cloud.google.com/compute/docs/instances/windows/generating-credentials https://cloud.google.com/compute/docs/instances/connecting-to-windows#before-you-begin

NEW QUESTION 130
You create a Deployment with 2 replicas in a Google Kubernetes Engine cluster that has a single preemptible node pool. After a few minutes, you use kubectl to examine the status of your Pod and observe that one of them is still in Pending status:

```
$ kubectl get pods -l app=myapp
NAME                                READY     STATUS    RESTART   AGE
myapp-deployment-58ddbbb995-lp86m   0/1       Pending   0         9m
myapp-deployment-58ddbbb995-qjpkg   1/1       Running   0         9m
```

What is the most likely cause?

A. The pending Pod's resource requests are too large to fit on a single node of the cluster.
B. Too many Pods are already running in the cluster, and there are not enough resources left to schedule the pending Pod.
C. The node pool is configured with a service account that does not have permission to pull the container image used by the pending Pod.
D. The pending Pod was originally scheduled on a node that has been preempted between the creation of the Deployment and your verification of the Pods’ statu
E. It is currently being rescheduled on a new node.

Answer: B

Explanation:

The pending Pods resource requests are too large to fit on a single node of the cluster. Too many Pods are already running in the cluster, and there are not enough resources left to schedule the pending Pod. is the right answer.

When you have a deployment with some pods in running and other pods in the pending state, more often than not it is a problem with resources on the nodes. Heres a sample output of this use case. We see that the problem is with insufficient CPU on the Kubernetes nodes so we have to either enable auto-scaling or manually scale up the nodes.

NEW QUESTION 132
Your organization has a dedicated person who creates and manages all service accounts for Google Cloud projects. You need to assign this person the minimum role for projects. What should you do?

A. Add the user to roles/iam.roleAdmin role.
B. Add the user to roles/iam.securityAdmin role.
C. Add the user to roles/iam.serviceAccountUser role.
D. Add the user to roles/iam.serviceAccountAdmin role.

Answer: D

NEW QUESTION 134
Your company implemented BigQuery as an enterprise data warehouse. Users from multiple business units run queries on this data warehouse. However, you notice that query costs for BigQuery are very high, and you need to control costs. Which two methods should you use? (Choose two.)

A. Split the users from business units to multiple projects.
B. Apply a user- or project-level custom query quota for BigQuery data warehouse.
C. Create separate copies of your BigQuery data warehouse for each business unit.
D. Split your BigQuery data warehouse into multiple data warehouses for each business unit.
E. Change your BigQuery query model from on-demand to flat rat
F. Apply the appropriate number of slots to each Project.

Answer: BE

Explanation:
https://cloud.google.com/bigquery/docs/custom-quotas https://cloud.google.com/bigquery/pricing#flat_rate_pricing

NEW QUESTION 139
You have an application running in Google Kubernetes Engine (GKE) with cluster autoscaling enabled. The application exposes a TCP endpoint. There are several replicas of this application. You have a Compute Engine instance in the same region, but in another Virtual Private Cloud (VPC), called gce-network, that has no overlapping IP ranges with the first VPC. This instance needs to connect to the application on GKE. You want to minimize effort. What should you do?

A. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Set the service's externalTrafficPolicy to Cluster.3. Configure the Compute Engine instance to use the address of the load balancer that has been created.
B. 1. In GKE, create a Service of type NodePort that uses the application's Pods as backend.2. Create a Compute Engine instance called proxy with 2 network interfaces, one in each VPC.3. Use iptables on this instance to forward traffic from gce-network to the GKE nodes.4. Configure the Compute Engine instance to use the address of proxy in gce-network as endpoint.
C. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Add an annotation to this service: cloud.google.com/load-balancer-type: Internal3. Peer the two VPCs together.4. Configure the Compute Engine instance to use the address of the load balancer that has been created.
D. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Add a Cloud Armor Security Policy to the load balancer that whitelists the internal IPs of the MIG's instances.3. Configure the Compute Engine instance to use the address of the load balancer that has been created.

Answer: C

Explanation:
performs a peering between the two VPC's (the statement makes sure that this option is feasible since it clearly specifies that there is no overlapping between the ip ranges of both vpc's), deploy the LoadBalancer as internal with the annotation, and configure the endpoint so that the compute engine instance can access the application internally, that is, without the need to have a public ip at any time and therefore, without the need to go outside the google network. The traffic, therefore, never crosses the public internet.
https://medium.com/pablo-perez/k8s-externaltrafficpolicy-local-or-cluster-40b259a19404 https://cloud.google.com/kubernetes-engine/docs/how-to/internal-load-balancing
clients in a VPC network connected to the LoadBalancer network using VPC Network Peering can also access the Service
https://cloud.google.com/kubernetes-engine/docs/how-to/service-parameters

NEW QUESTION 144
You have deployed an application on a single Compute Engine instance. The application writes logs to disk. Users start reporting errors with the application. You want to diagnose the problem. What should you do?

A. Navigate to Cloud Logging and view the application logs.
B. Connect to the instance’s serial console and read the application logs.
C. Configure a Health Check on the instance and set a Low Healthy Threshold value.
D. Install and configure the Cloud Logging Agent and view the logs from Cloud Logging.

Answer: D

NEW QUESTION 148
A colleague handed over a Google Cloud Platform project for you to maintain. As part of a security checkup, you want to review who has been granted the Project Owner role. What should you do?

A. In the console, validate which SSH keys have been stored as project-wide keys.
B. Navigate to Identity-Aware Proxy and check the permissions for these resources.
C. Enable Audit Logs on the IAM & admin page for all resources, and validate the results.
D. Use the command gcloud projects get–iam–policy to view the current role assignments.

Answer: D

Explanation:
A simple approach would be to use the command flags available when listing all the IAM policy for a given project. For instance, the following command: `gcloud projects get-iam-policy $PROJECT_ID
--flatten="bindings[].members" --format="table(bindings.members)" --filter="bindings.role:roles/owner"` outputs all the users and service accounts associated with the role 'roles/owner' in the project in question. https://groups.google.com/g/google-cloud-dev/c/Z6sZs7TvygQ?pli=1

NEW QUESTION 153
You want to run a single caching HTTP reverse proxy on GCP for a latency-sensitive website. This specific reverse proxy consumes almost no CPU. You want to have a 30-GB in-memory cache, and need an additional 2 GB of memory for the rest of the processes. You want to minimize cost. How should you run this reverse proxy?

A. Create a Cloud Memorystore for Redis instance with 32-GB capacity.
B. Run it on Compute Engine, and choose a custom instance type with 6 vCPUs and 32 GB of memory.
C. Package it in a container image, and run it on Kubernetes Engine, using n1-standard-32 instances as nodes.
D. Run it on Compute Engine, choose the instance type n1-standard-1, and add an SSD persistent disk of 32 GB.

Answer: A

Explanation:
What is Google Cloud Memorystore?
Overview. Cloud Memorystore for Redis is a fully managed Redis service for Google Cloud Platform. Applications running on Google Cloud Platform can achieve extreme performance by leveraging the highly scalable, highly available, and secure Redis service without the burden of managing complex Redis deployments.

NEW QUESTION 157
Your organization has strict requirements to control access to Google Cloud projects. You need to enable your Site Reliability Engineers (SREs) to approve requests from the Google Cloud support team when an SRE opens a support case. You want to follow Google-recommended practices. What should you do?

A. Add your SREs to roles/iam.roleAdmin role.
B. Add your SREs to roles/accessapproval approver role.
C. Add your SREs to a group and then add this group to roles/iam roleAdmin role.
D. Add your SREs to a group and then add this group to roles/accessapproval approver role.

Answer: D

NEW QUESTION 159
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.

Answer: A

Explanation:
https://cloud.google.com/compute/docs/autoscaler#specifications
Autoscaling works independently from autohealing. If you configure autohealing for your group and an instance fails the health check, the autohealer attempts to recreate the instance. Recreating an instance can cause the number of instances in the group to fall below the autoscaling threshold (minNumReplicas) that you specify.

- Since we need the application running at all times, we need a minimum 1 instance.
- Only a single instance of the VM should run, we need a maximum 1 instance.
- We want the application running at all times. If the VM crashes due to any underlying hardware failure, we want another instance to be added to MIG so that application can continue to serve requests. We can achieve this by enabling autoscaling. The only option that satisfies these three is Set autoscaling to On, set the minimum number of instances to 1, and then set the maximum number of instances to 1.

Ref: https://cloud.google.com/compute/docs/autoscaler

NEW QUESTION 164
You are performing a monthly security check of your Google Cloud environment and want to know who has access to view data stored in your Google Cloud Project. What should you do?

A. Enable Audit Logs for all APIs that are related to data storage.
B. Review the IAM permissions for any role that allows for data acces
C. Most Voted
D. Review the Identity-Aware Proxy settings for each resource.
E. Create a Data Loss Prevention job.

Answer: B

Explanation:
https://cloud.google.com/logging/docs/audit

NEW QUESTION 169
You are about to deploy a new Enterprise Resource Planning (ERP) system on Google Cloud. The application holds the full database in-memory for fast data access, and you need to configure the most appropriate resources on Google Cloud for this application. What should you do?

A. Provision preemptible Compute Engine instances.
B. Provision Compute Engine instances with GPUs attached.
C. Provision Compute Engine instances with local SSDs attached.
D. Provision Compute Engine instances with M1 machine type.

Answer: D

Explanation:
M1 machine series Medium in-memory databases such as SAP HANA Tasks that require intensive use of memory with higher memory-to-vCPU ratios than the general-purpose high-memory machine types.
In-memory databases and in-memory analytics, business warehousing (BW) workloads, genomics analysis, SQL analysis services. Microsoft SQL Server and similar databases.
https://cloud.google.com/compute/docs/machine-types
https://cloud.google.com/compute/docs/machine-types#:~:text=databases%20such%20as-,SAP%20HANA,-In%
https://www.sap.com/india/products/hana.html#:~:text=is%20SAP%20HANA-,in%2Dmemory,-database%3F

NEW QUESTION 174
You have one project called proj-sa where you manage all your service accounts. You want to be able to use a service account from this project to take snapshots of VMs running in another project called proj-vm. What should you do?

A. Download the private key from the service account, and add it to each VMs custom metadata.
B. Download the private key from the service account, and add the private key to each VM's SSH keys.
C. Grant the service account the IAM Role of Compute Storage Admin in the project called proj-vm.
D. When creating the VMs, set the service account's API scope for Compute Engine to read/write.

Answer: C

Explanation:
https://gtseres.medium.com/using-service-accounts-across-projects-in-gcp-cf9473fef8f0
You create the service account in proj-sa and take note of the service account email, then you go to proj-vm in IAM > ADD and add the service account's email as new member and give it the Compute Storage Admin role.
https://cloud.google.com/compute/docs/access/iam#compute.storageAdmin

NEW QUESTION 178
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 much 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.

Answer: B

Explanation:
https://cloud.google.com/storage/docs/parallel-composite-uploads https://cloud.google.com/storage/docs/uploads-downloads#parallel-composite-uploads

NEW QUESTION 181
You want to select and configure a solution for storing and archiving data on Google Cloud Platform. You need to support compliance objectives for data from one geographic location. This data is archived after 30 days and needs to be accessed annually. What should you do?

A. Select Multi-Regional Storag
B. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.
C. Select Multi-Regional Storag
D. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
E. Select Regional Storag
F. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
G. Select Regional Storag
H. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.

Answer: D

Explanation:
Google Cloud Coldline is a new cold-tier storage for archival data with access frequency of less than once per year. Unlike other cold storage options, Nearline has no delays prior to data access, so now it is the leading solution among competitors.
The Real description is about Coldline storage Class: Coldline Storage
Coldline Storage is a very-low-cost, highly durable storage service for storing infrequently accessed data. Coldline Storage is a better choice than Standard Storage or Nearline Storage in scenarios where slightly lower availability, a 90-day minimum storage duration, and higher costs for data access are acceptable trade-offs for lowered at-rest storage costs.
Coldline Storage is ideal for data you plan to read or modify at most once a quarter. Note, however, that for data being kept entirely for backup or archiving purposes, Archive Storage is more cost-effective, as it offers the lowest storage costs.
https://cloud.google.com/storage/docs/storage-classes#coldline

NEW QUESTION 185

Your auditor wants to view your organization's use of data in Google Cloud. The auditor is most interested in auditing who accessed data in Cloud Storage buckets. You need to help the auditor access the data they need. What should you do?

A. Assign the appropriate permissions, and then use Cloud Monitoring to review metrics
B. Use the export logs API to provide the Admin Activity Audit Logs in the format they want
C. Turn on Data Access Logs for the buckets they want to audit, and Then build a query in the log viewer that filters on Cloud Storage
D. Assign the appropriate permissions, and then create a Data Studio report on Admin Activity Audit Logs

Answer: C

Explanation:
Types of audit logs Cloud Audit Logs provides the following audit logs for each Cloud project, folder, and organization: Admin Activity audit logs Data Access audit logs System Event audit logs Policy Denied audit logs ***Data Access audit logs contain API calls that read the configuration or metadata of resources, as well as user-driven API calls that create, modify, or read user-provided resource data. https://cloud.google.com/logging/docs/audit#types
https://cloud.google.com/logging/docs/audit#data-access Cloud Storage: When Cloud Storage usage logs are enabled, Cloud Storage writes usage data to the Cloud Storage bucket, which generates Data Access audit logs for the bucket. The generated Data Access audit log has its caller identity redacted.

NEW QUESTION 187
Your company developed a mobile game that is deployed on Google Cloud. Gamers are connecting to the game with their personal phones over the Internet. The game sends UDP packets to update the servers about the gamers' actions while they are playing in multiplayer mode. Your game backend can scale over multiple virtual machines (VMs), and you want to expose the VMs over a single IP address. What should you do?

A. Configure an SSL Proxy load balancer in front of the application servers.
B. Configure an Internal UDP load balancer in front of the application servers.
C. Configure an External HTTP(s) load balancer in front of the application servers.
D. Configure an External Network load balancer in front of the application servers.

Answer: D

Explanation:
cell phones are sending UDP packets and the only that can receive that type of traffic is a External Network TCP/UDP https://cloud.google.com/load-balancing/docs/network
https://cloud.google.com/load-balancing/docs/choosing-load-balancer#lb-decision-tree

NEW QUESTION 192
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.

Answer: A

Explanation:
You can deploy to a different project by using –project flag.
By default, the service is deployed the current project configured via:
$ gcloud config set core/project PROJECT
To override this value for a single deployment, use the –project flag:
$ gcloud app deploy ~/my_app/app.yaml –project=PROJECT Ref: https://cloud.google.com/sdk/gcloud/reference/app/deploy

NEW QUESTION 193
You are running multiple VPC-native Google Kubernetes Engine clusters in the same subnet. The IPs available for the nodes are exhausted, and you want to ensure that the clusters can grow in nodes when needed. What should you do?

A. Create a new subnet in the same region as the subnet being used.
B. Add an alias IP range to the subnet used by the GKE clusters.
C. Create a new VPC, and set up VPC peering with the existing VPC.
D. Expand the CIDR range of the relevant subnet for the cluster.

Answer: D

Explanation:
gcloud compute networks subnets expand-ip-range NAME gcloud compute networks subnets expand-ip-range
- expand the IP range of a Compute Engine subnetwork https://cloud.google.com/sdk/gcloud/reference/compute/networks/subnets/expand-ip-range

NEW QUESTION 195
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

Answer: A

Explanation:

https://cloud.google.com/deployment-manager/docs/configuration/create-basic-configuration

NEW QUESTION 196
Your company publishes large files on an Apache web server that runs on a Compute Engine instance. The Apache web server is not the only application running in the project. You want to receive an email when the egress network costs for the server exceed 100 dollars for the current month as measured by Google Cloud Platform (GCP). What should you do?

A. Set up a budget alert on the project with an amount of 100 dollars, a threshold of 100%, and notification type of “email.”
B. Set up a budget alert on the billing account with an amount of 100 dollars, a threshold of 100%, and notification type of “email.”
C. Export the billing data to BigQuer
D. Create a Cloud Function that uses BigQuery to sum the egress network costs of the exported billing data for the Apache web server for the current month and sends an email if it is over 100 dollar
E. Schedule the Cloud Function using Cloud Scheduler to run hourly.
F. Use the Stackdriver Logging Agent to export the Apache web server logs to Stackdriver Logging.Create a Cloud Function that uses BigQuery to parse the HTTP response log data in Stackdriver for the current month and sends an email if the size of all HTTP responses, multiplied by current GCP egress prices, totals over 100 dollar
G. Schedule the Cloud Function using Cloud Scheduler to run hourly.

Answer: C

Explanation:
https://blog.doit-intl.com/the-truth-behind-google-cloud-egress-traffic-6e8f57b5c2f8

NEW QUESTION 198
An application generates daily reports in a Compute Engine virtual machine (VM). The VM is in the project corp-iot-insights. Your team operates only in the project corp-aggregate-reports and needs a copy of the daily exports in the bucket corp-aggregate-reports-storage. You want to configure access so that the daily reports from the VM are available in the bucket corp-aggregate-reports-storage and use as few steps as possible while following Google-recommended practices. What should you do?

A. Move both projects under the same folder.
B. Grant the VM Service Account the role Storage Object Creator on corp-aggregate-reports-storage.
C. Create a Shared VPC network between both project
D. Grant the VM Service Account the role Storage Object Creator on corp-iot-insights.
E. Make corp-aggregate-reports-storage public and create a folder with a pseudo-randomized suffix name.Share the folder with the IoT team.

Answer: B

Explanation:
Predefined roles
The following table describes Identity and Access Management (IAM) roles that are associated with Cloud Storage and lists the permissions that are contained in each role. Unless otherwise noted, these roles can be applied either to entire projects or specific buckets.
Storage Object Creator (roles/storage.objectCreator) Allows users to create objects. Does not give permission to view, delete, or overwrite objects.
https://cloud.google.com/storage/docs/access-control/iam-roles#standard-roles

NEW QUESTION 199
The core business of your company is to rent out construction equipment at a large scale. All the equipment that is being rented out has been equipped with multiple sensors that send event information every few seconds. These signals can vary from engine status, distance traveled, fuel level, and more. Customers are billed based on the consumption monitored by these sensors. You expect high throughput – up to thousands of events per hour per device – and need to retrieve consistent data based on the time of the event. Storing and retrieving individual signals should be atomic. What should you do?

A. Create a file in Cloud Storage per device and append new data to that file.
B. Create a file in Cloud Filestore per device and append new data to that file.
C. Ingest the data into Datastor
D. Store data in an entity group based on the device.
E. Ingest the data into Cloud Bigtabl
F. Create a row key based on the event timestamp.

Answer: D

Explanation:
Keyword need to look for
- "High Throughput",
- "Consistent",
- "Property based data insert/fetch like ngine status, distance traveled, fuel level, and more." which can be designed in column,
- "Large Scale Customer Base + Each Customer has multiple sensor which send event in seconds" This will go for pera bytes situation,
- Export data based on the time of the event.
- Atomic
o BigTable will fit all requirement. o DataStore is not fully Atomic
o CloudStorage is not a option where we can export data based on time of event. We need another solution to do that
o FireStore can be used with MobileSDK.

NEW QUESTION 204
You need to assign a Cloud Identity and Access Management (Cloud IAM) role to an external auditor. The auditor needs to have permissions to review your Google Cloud Platform (GCP) Audit Logs and also to review your Data Access logs. What should you do?

A. Assign the auditor the IAM role roles/logging.privateLogViewe
B. Perform the export of logs to Cloud Storage.
C. Assign the auditor the IAM role roles/logging.privateLogViewe
D. Direct the auditor to also review the logs for changes to Cloud IAM policy.

E. Assign the auditor's IAM user to a custom role that has logging.privateLogEntries.list permissio
F. Perform the export of logs to Cloud Storage.
G. Assign the auditor's IAM user to a custom role that has logging.privateLogEntries.list permissio
H. Direct the auditor to also review the logs for changes to Cloud IAM policy.

Answer: B

Explanation:
Google Cloud provides Cloud Audit Logs, which is an integral part of Cloud Logging. It consists of two log streams for each project: Admin Activity and Data Access, which are generated by Google Cloud services to help you answer the question of who did what, where, and when? within your Google Cloud projects.
Ref: https://cloud.google.com/iam/docs/job-functions/auditing#scenario_external_auditors

NEW QUESTION 208
You are using Deployment Manager to create a Google Kubernetes Engine cluster. Using the same Deployment Manager deployment, you also want to create a DaemonSet in the kube-system namespace of the cluster. You want a solution that uses the fewest possible services. What should you do?

A. Add the cluster's API as a new Type Provider in Deployment Manager, and use the new type to create the DaemonSet.
B. Use the Deployment Manager Runtime Configurator to create a new Config resource that contains the DaemonSet definition.
C. With Deployment Manager, create a Compute Engine instance with a startup script that uses kubectl to create the DaemonSet.
D. In the cluster's definition in Deployment Manager, add a metadata that has kube-system as key and the DaemonSet manifest as value.

Answer: A

Explanation:
Adding an API as a type provider
This page describes how to add an API to Google Cloud Deployment Manager as a type provider. To learn more about types and type providers, read the Types overview documentation.
A type provider exposes all of the resources of a third-party API to Deployment Manager as base types that you can use in your configurations. These types must be directly served by a RESTful API that supports Create, Read, Update, and Delete (CRUD).
If you want to use an API that is not automatically provided by Google with Deployment Manager, you must add the API as a type provider.
https://cloud.google.com/deployment-manager/docs/configuration/type-providers/creating-type-provider

NEW QUESTION 212
You want to select and configure a cost-effective solution for relational data on Google Cloud Platform. You are working with a small set of operational data in one geographic location. You need to support point-in-time recovery. What should you do?

A. Select Cloud SQL (MySQL). Verify that the enable binary logging option is selected.
B. Select Cloud SQL (MySQL). Select the create failover replicas option.
C. Select Cloud Spanne
D. Set up your instance with 2 nodes.
E. Select Cloud Spanne
F. Set up your instance as multi-regional.

Answer: A

NEW QUESTION 216
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 accoun
C. On the Project Metadata, add that JSON as the value for the key compute-engine-service-account.
D. Download a JSON Private Key for the service accoun
E. On the Custom Metadata of the VM, add that JSON as the value for the key compute-engine-service-account.
F. Download a JSON Private Key for the service accoun
G. After creating the VM, ssh into the VM and save the JSON under ~/.gcloud/compute-engine-service-account.json.

Answer: A

NEW QUESTION 219
You have downloaded and installed the gcloud command line interface (CLI) and have authenticated with your Google Account. Most of your Compute Engine instances in your project run in the europe-west1-d zone. You want to avoid having to specify this zone with each CLI command when managing these instances. What should you do?

A. Set the europe-west1-d zone as the default zone using the gcloud config subcommand.
B. In the Settings page for Compute Engine under Default location, set the zone to europe–west1-d.
C. In the CLI installation directory, create a file called default.conf containing zone=europe–west1–d.
D. Create a Metadata entry on the Compute Engine page with key compute/zone and value europe–west1–d.

Answer: A

Explanation:
Change your default zone and region in the metadata server Note: This only applies to the default configuration. You can change the default zone and region in your metadata server by making a request to the metadata server. For example: gcloud compute project-info add-metadata \ --metadata google-compute-default-region=europe-west1,google-compute-default-zone=europe-west1-b The gcloud command-line tool only picks up on new default zone and region changes after you rerun the gcloud init command. After updating your default metadata, run gcloud init to reinitialize your default configuration.
https://cloud.google.com/compute/docs/gcloud-compute#change_your_default_zone_and_region_in_the_metad

NEW QUESTION 222
You want to configure an SSH connection to a single Compute Engine instance for users in the dev1 group. This instance is the only resource in this particular Google Cloud Platform project that the dev1 users should be able to connect to. What should you do?

A. Set metadata to enable-oslogin=true for the instanc
B. Grant the dev1 group the compute.osLogin role.Direct them to use the Cloud Shell to ssh to that instance.
C. Set metadata to enable-oslogin=true for the instanc
D. Set the service account to no service account for that instanc
E. Direct them to use the Cloud Shell to ssh to that instance.
F. Enable block project wide keys for the instanc
G. Generate an SSH key for each user in the dev1 group.Distribute the keys to dev1 users and direct them to use their third-party tools to connect.
H. Enable block project wide keys for the instanc
I. Generate an SSH key and associate the key with that instanc
J. Distribute the key to dev1 users and direct them to use their third-party tools to connect.

Answer: A

NEW QUESTION 224
You have a number of compute instances belonging to an unmanaged instances group. You need to SSH to one of the Compute Engine instances to run an ad hoc script. You've already authenticated gcloud, however, you don't have an SSH key deployed yet. In the fewest steps possible, what's the easiest way to SSH to the instance?

A. Run gcloud compute instances list to get the IP address of the instance, then use the ssh command.
B. Use the gcloud compute ssh command.
C. Create a key with the ssh-keygen comman
D. Then use the gcloud compute ssh command.
E. Create a key with the ssh-keygen comman
F. Upload the key to the instanc
G. Run gcloud compute instances list to get the IP address of the instance, then use the ssh command.

Answer: B

Explanation:
gcloud compute ssh ensures that the user's public SSH key is present in the project's metadata. If the user does not have a public SSH key, one is generated using ssh-keygen and added to the project's metadata. This is similar to the other option where we copy the key explicitly to the project's metadata but here it is done automatically for us. There are also security benefits with this approach. When we use gcloud compute ssh to connect to Linux instances, we are adding a layer of security by storing your host keys as guest attributes. Storing SSH host keys as guest attributes improve the security of your connections by helping to protect against vulnerabilities such as man-in-the-middle (MITM) attacks. On the initial boot of a VM instance, if guest attributes are enabled, Compute Engine stores your generated host keys as guest attributes.
Compute Engine then uses these host keys that were stored during the initial boot to verify all subsequent connections to the VM instance.
Ref: https://cloud.google.com/compute/docs/instances/connecting-to-instanceRef: https://cloud.google.com/s

NEW QUESTION 229
Your company uses a large number of Google Cloud services centralized in a single project. All teams have specific projects for testing and development. The DevOps team needs access to all of the production services in order to perform their job. You want to prevent Google Cloud product changes from broadening their permissions in the future. You want to follow Google-recommended practices. What should you do?

A. Grant all members of the DevOps team the role of Project Editor on the organization level.
B. Grant all members of the DevOps team the role of Project Editor on the production project.
C. Create a custom role that combines the required permission
D. Grant the DevOps team the custom role on the production project.
E. Create a custom role that combines the required permission
F. Grant the DevOps team the custom role on the organization level.

Answer: C

Explanation:
Understanding IAM custom roles
Key Point: Custom roles enable you to enforce the principle of least privilege, ensuring that the user and service accounts in your organization have only the permissions essential to performing their intended functions.
Basic concepts
Custom roles are user-defined, and allow you to bundle one or more supported permissions to meet your specific needs. Custom roles are not maintained by Google; when new permissions, features, or services are added to Google Cloud, your custom roles will not be updated automatically.
When you create a custom role, you must choose an organization or project to create it in. You can then grant the custom role on the organization or project, as well as any resources within that organization or project.
https://cloud.google.com/iam/docs/understanding-custom-roles#basic_concepts

NEW QUESTION 234
You need to manage multiple Google Cloud Platform (GCP) projects in the fewest steps possible. You want to configure the Google Cloud SDK command line interface (CLI) so that you can easily manage multiple GCP projects. What should you?

A. * 1. Create a configuration for each project you need to manage.* 2. Activate the appropriate configuration when you work with each of your assigned GCP projects.
B. * 1. Create a configuration for each project you need to manage.* 2. Use gcloud init to update the configuration values when you need to work with a non-default project
C. * 1. Use the default configuration for one project you need to manage.* 2. Activate the appropriate configuration when you work with each of your assigned GCP projects.
D. * 1. Use the default configuration for one project you need to manage.* 2. Use gcloud init to update the configuration values when you need to work with a non-default project.

Answer: A

Explanation:
https://cloud.google.com/sdk/gcloud https://cloud.google.com/sdk/docs/configurations#multiple_configurations

NEW QUESTION 239
You need to create an autoscaling managed instance group for an HTTPS web application. You want to make sure that unhealthy VMs are recreated. What should you do?

A. Create a health check on port 443 and use that when creating the Managed Instance Group.
B. Select Multi-Zone instead of Single-Zone when creating the Managed Instance Group.
C. In the Instance Template, add the label 'health-check'.
D. In the Instance Template, add a startup script that sends a heartbeat to the metadata server.

Answer: A

Explanation:
https://cloud.google.com/compute/docs/instance-groups/autohealing-instances-in-migs#setting_up_an_autoheali

NEW QUESTION 243
You have a workload running on Compute Engine that is critical to your business. You want to ensure that the data on the boot disk of this workload is backed up regularly. You need to be able to restore a backup as quickly as possible in case of disaster. You also want older backups to be cleaned automatically to save on cost. You want to follow Google-recommended practices. What should you do?

A. Create a Cloud Function to create an instance template.
B. Create a snapshot schedule for the disk using the desired interval.
C. Create a cron job to create a new disk from the disk using gcloud.
D. Create a Cloud Task to create an image and export it to Cloud Storage.

Answer: B

Explanation:
Best practices for persistent disk snapshots
You can create persistent disk snapshots at any time, but you can create snapshots more quickly and with greater reliability if you use the following best practices.
Creating frequent snapshots efficiently
Use snapshots to manage your data efficiently.
Create a snapshot of your data on a regular schedule to minimize data loss due to unexpected failure. Improve performance by eliminating excessive snapshot downloads and by creating an image and reusing it. Set your snapshot schedule to off-peak hours to reduce snapshot time.
Snapshot frequency limits
Creating snapshots from persistent disks
You can snapshot your disks at most once every 10 minutes. If you want to issue a burst of requests to snapshot your disks, you can issue at most 6 requests in 60 minutes.
If the limit is exceeded, the operation fails and returns the following error: https://cloud.google.com/compute/docs/disks/snapshot-best-practices

NEW QUESTION 246
You need to configure IAM access audit logging in BigQuery for external auditors. You want to follow Google-recommended practices. What should you do?

A. Add the auditors group to the 'logging.viewer' and 'bigQuery.dataViewer' predefined IAM roles.
B. Add the auditors group to two new custom IAM roles.
C. Add the auditor user accounts to the 'logging.viewer' and 'bigQuery.dataViewer' predefined IAM roles.
D. Add the auditor user accounts to two new custom IAM roles.

Answer: A

Explanation:
https://cloud.google.com/iam/docs/job-functions/auditing#scenario_external_auditors
Because if you directly add users to the IAM roles, then if any users left the organization then you have to remove the users from multiple places and need to revoke his/her access from multiple places. But, if you put a user into a group then its very easy to manage these type of situations. Now, if any user left then you just need to remove the user from the group and all the access got revoked
The organization creates a Google group for these external auditors and adds the current auditor to the group. This group is monitored and is typically granted access to the dashboard application. During normal access, the auditors' Google group is only granted access to view the historic logs stored in BigQuery. If any anomalies are discovered, the group is granted permission to view the actual Cloud Logging Admin Activity logs via the dashboard's elevated access mode. At the end of each audit period, the group's access is then revoked. Data is redacted using Cloud DLP before being made accessible for viewing via the dashboard application. The table below explains IAM logging roles that an Organization Administrator can grant to the service account used by the dashboard, as well as the resource level at which the role is granted.

NEW QUESTION 248
You want to configure 10 Compute Engine instances for availability when maintenance occurs. Your requirements state that these instances should attempt to automatically restart if they crash. Also, the instances should be highly available including during system maintenance. What should you do?

A. Create an instance template for the instance
B. Set the 'Automatic Restart' to o
C. Set the 'On-host maintenance' to Migrate VM instanc
D. Add the instance template to an instance group.
E. Create an instance template for the instance
F. Set 'Automatic Restart' to of
G. Set 'On-host maintenance' to Terminate VM instance
H. Add the instance template to an instance group.
I. Create an instance group for the instance

J. Set the ‘Autohealing’ health check to healthy (HTTP).
K. Create an instance group for the instanc
L. Verify that the ‘Advanced creation options’ setting for ‘do not retry machine creation’ is set to off.

Answer: A

Explanation:
Create an instance template for the instances so VMs have same specs. Set the "˜Automatic Restart' to on to VM automatically restarts upon crash. Set the "˜On-host maintenance' to Migrate VM instance. This will take care of VM during maintenance window. It will migrate VM instance making it highly available Add the instance template to an instance group so instances can be managed.
• onHostMaintenance: Determines the behavior when a maintenance event occurs that might cause your instance to reboot.
• [Default] MIGRATE, which causes Compute Engine to live migrate an instance when there is a maintenance event.
• TERMINATE, which stops an instance instead of migrating it.
• automaticRestart: Determines the behavior when an instance crashes or is stopped by the system.
• [Default] true, so Compute Engine restarts an instance if the instance crashes or is stopped.
• false, so Compute Engine does not restart an instance if the instance crashes or is stopped.
Enabling automatic restart ensures that compute engine instances are automatically restarted when they crash. And Enabling Migrate VM Instance enables live migrates i.e. compute instances are migrated during system maintenance and remain running during the migration.
Automatic Restart If your instance is set to terminate when there is a maintenance event, or if your instance crashes because of an underlying hardware issue, you can set up Compute Engine to automatically restart the instance by setting the automaticRestart field to true. This setting does not apply if the instance is taken offline through a user action, such as calling sudo shutdown, or during a zone
outage.Ref: https://cloud.google.com/compute/docs/instances/setting-instance-scheduling-options#autorestart
Enabling the Migrate VM Instance option migrates your instance away from an infrastructure maintenance event, and your instance remains running during the migration. Your instance might experience a short period of decreased performance, although generally, most instances should not notice any difference. This is ideal for instances that require constant uptime and can tolerate a short period of decreased
performance.Ref: https://cloud.google.com/compute/docs/instances/setting-instance-scheduling-options#live_

NEW QUESTION 252
You are assigned to maintain a Google Kubernetes Engine (GKE) cluster named dev that was deployed on Google Cloud. You want to manage the GKE configuration using the command line interface (CLI). You have just downloaded and installed the Cloud SDK. You want to ensure that future CLI commands by default address this specific cluster. What should you do?

A. Use the command gcloud config set container/cluster dev.
B. Use the command gcloud container clusters update dev.
C. Create a file called gke.default in the ~/.gcloud folder that contains the cluster name.
D. Create a file called defaults.json in the ~/.gcloud folder that contains the cluster name.

Answer: A

Explanation:
To set a default cluster for gcloud commands, run the following command: gcloud config set container/cluster CLUSTER_NAME
https://cloud.google.com/kubernetes-engine/docs/how-to/managing-clusters?hl=en

NEW QUESTION 255
Your company has developed a new application that consists of multiple microservices. You want to deploy the application to Google Kubernetes Engine (GKE), and you want to ensure that the cluster can scale as more applications are deployed in the future. You want to avoid manual intervention when each new application is deployed. What should you do?

A. Deploy the application on GKE, and add a HorizontalPodAutoscaler to the deployment.
B. Deploy the application on GKE, and add a VerticalPodAutoscaler to the deployment.
C. Create a GKE cluster with autoscaling enabled on the node poo
D. Set a minimum and maximum for the size of the node pool.
E. Create a separate node pool for each application, and deploy each application to its dedicated node pool.

Answer: C

Explanation:
https://cloud.google.com/kubernetes-engine/docs/how-to/cluster-autoscaler#adding_a_node_pool_with_autoscal

NEW QUESTION 257
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

Answer: D

NEW QUESTION 262
You built an application on Google Cloud Platform that uses Cloud Spanner. Your support team needs to monitor the environment but should not have access to table data. You need a streamlined solution to grant the correct permissions to your support team, and you want to follow Google-recommended practices. What should you do?

A. Add the support team group to the roles/monitoring.viewer role
B. Add the support team group to the roles/spanner.databaseUser role.
C. Add the support team group to the roles/spanner.databaseReader role.
D. Add the support team group to the roles/stackdriver.accounts.viewer role.

Answer: A

Explanation:
roles/monitoring.viewer provides read-only access to get and list information about all monitoring data and configurations. This role provides monitoring access and fits our requirements. roles/monitoring.viewer. is the right answer.
Ref: https://cloud.google.com/iam/docs/understanding-roles#cloud-spanner-roles

NEW QUESTION 267
You have files in a Cloud Storage bucket that you need to share with your suppliers. You want to restrict the time that the files are available to your suppliers to 1 hour. You want to follow Google recommended practices. What should you do?

A. Create a service account with just the permissions to access files in the bucke
B. Create a JSON key for the service accoun
C. Execute the command gsutil signurl -m 1h gs:///*.
D. Create a service account with just the permissions to access files in the bucke
E. Create a JSON key for the service accoun
F. Execute the command gsutil signurl -d 1h gs:///**.
G. Create a service account with just the permissions to access files in the bucke
H. Create a JSON key for the service accoun
I. Execute the command gsutil signurl -p 60m gs:///.
J. Create a JSON key for the Default Compute Engine Service Accoun
K. Execute the command gsutil signurl -t 60m gs:///***

Answer: B

Explanation:
This command correctly specifies the duration that the signed url should be valid for by using the -d flag. The default is 1 hour so omitting the -d flag would have also resulted in the same outcome. Times may be specified with no suffix (default hours), or with s = seconds, m = minutes, h = hours, d = days. The max duration allowed is 7d.Ref: https://cloud.google.com/storage/docs/gsutil/commands/signurl

NEW QUESTION 270
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 Organization.
D. In the Google Cloud Platform Console, create a new billing account and set up a payment method.

Answer: D

Explanation:
(https://cloud.google.com/resource-manager/docs/project-migration#change_billing_account) https://cloud.google.com/billing/docs/concepts https://cloud.google.com/resource-manager/docs/project-migration

NEW QUESTION 273
You are working with a Cloud SQL MySQL database at your company. You need to retain a month-end copy of the database for three years for audit purposes. What should you do?

A. Save file automatic first-of-the- month backup for three years Store the backup file in an Archive class Cloud Storage bucket
B. Convert the automatic first-of-the-month backup to an export file Write the export file to a Coldline class Cloud Storage bucket
C. Set up an export job for the first of the month Write the export file to an Archive class Cloud Storage bucket
D. Set up an on-demand backup tor the first of the month Write the backup to an Archive class Cloud Storage bucket

Answer: C

Explanation:
https://cloud.google.com/sql/docs/mysql/backup-recovery/backups#can_i_export_a_backup https://cloud.google.com/sql/docs/mysql/import-export#automating_export_operations

NEW QUESTION 277
Your organization needs to grant users access to query datasets in BigQuery but prevent them from accidentally deleting the datasets. You want a solution that follows Google-recommended practices. What should you do?

A. Add users to roles/bigquery user role only, instead of roles/bigquery dataOwner.
B. Add users to roles/bigquery dataEditor role only, instead of roles/bigquery dataOwner.
C. Create a custom role by removing delete permissions, and add users to that role only.
D. Create a custom role by removing delete permission
E. Add users to the group, and then add the group to the custom role.

Answer: D

Explanation:
https://cloud.google.com/bigquery/docs/access-control#custom_roles
Custom roles enable you to enforce the principle of least privilege, ensuring that the user and service accounts in your organization have only the permissions essential to performing their intended functions.

NEW QUESTION 282
You need to create a custom IAM role for use with a GCP service. All permissions in the role must be suitable for production use. You also want to clearly share with your organization the status of the custom role. This will be the first version of the custom role. What should you do?

A. Use permissions in your role that use the 'supported' support level for role permission
B. Set the role stage to ALPHA while testing the role permissions.
C. Use permissions in your role that use the 'supported' support level for role permission
D. Set the role stage to BETA while testing the role permissions.
E. Use permissions in your role that use the 'testing' support level for role permission
F. Set the role stage to ALPHA while testing the role permissions.
G. Use permissions in your role that use the 'testing' support level for role permission
H. Set the role stage to BETA while testing the role permissions.

Answer: A

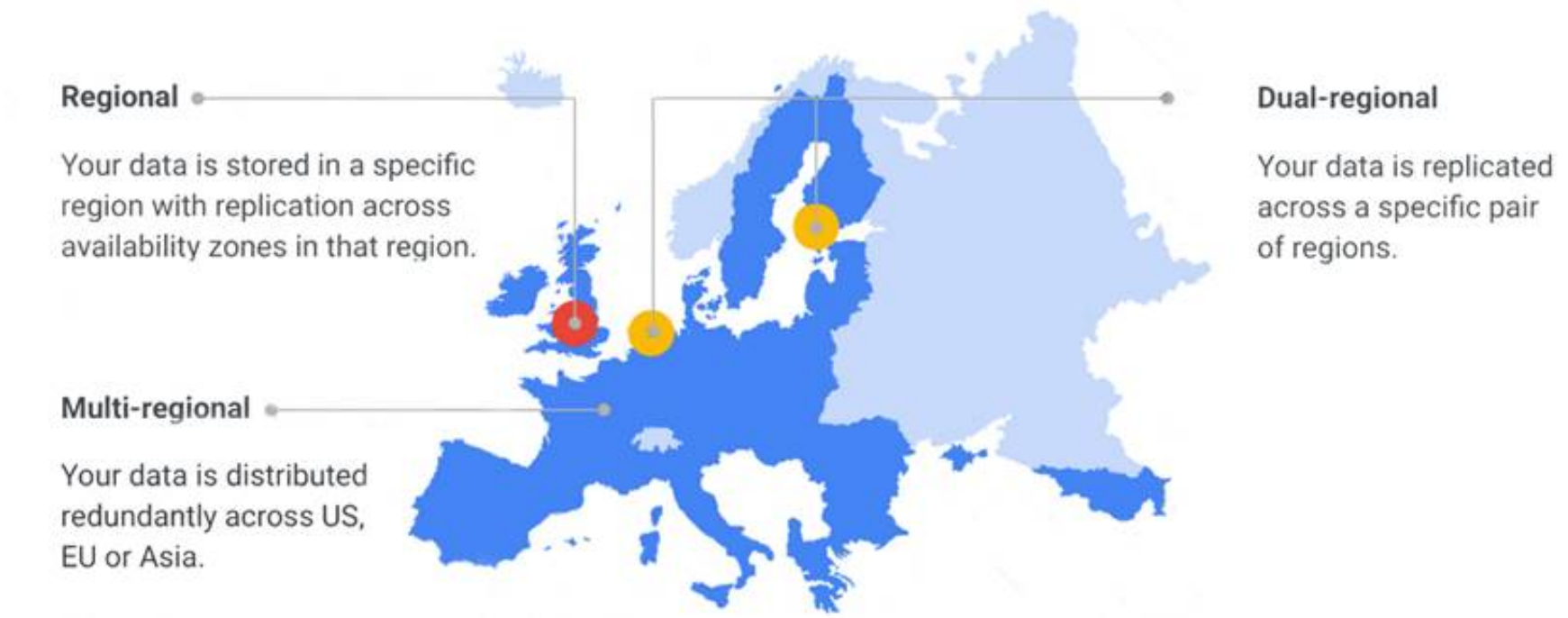
Explanation:
When setting support levels for permissions in custom roles, you can set to one of SUPPORTED, TESTING or NOT_SUPPORTED.
Ref: https://cloud.google.com/iam/docs/custom-roles-permissions-support

NEW QUESTION 285
You are designing an application that lets users upload and share photos. You expect your application to grow really fast and you are targeting a worldwide audience. You want to delete uploaded photos after 30 days. You want to minimize costs while ensuring your application is highly available. Which GCP storage solution should you choose?

A. Persistent SSD on VM instances.
B. Cloud Filestore.
C. Multiregional Cloud Storage bucket.
D. Cloud Datastore database.

Answer: C

Explanation:
Cloud Storage allows world-wide storage and retrieval of any amount of data at any time. We dont need to set up auto-scaling ourselves. Cloud Storage autoscaling is managed by GCP. Cloud Storage is an object store so it is suitable for storing photos. Cloud Storage allows world-wide storage and retrieval so cater well to our worldwide audience. Cloud storage provides us lifecycle rules that can be configured to automatically delete objects older than 30 days. This also fits our requirements. Finally, Google Cloud Storage offers several storage classes such as Nearline Storage ($0.01 per GB per Month) Coldline Storage ($0.007 per GB per Month) and Archive Storage ($0.004 per GB per month) which are significantly cheaper than any of the options above.
Ref: https://cloud.google.com/storage/docs
Ref: https://cloud.google.com/storage/pricing



NEW QUESTION 289
You need to run an important query in BigQuery but expect it to return a lot of records. You want to find out how much it will cost to run the query. You are using on-demand pricing. What should you do?

A. Arrange to switch to Flat-Rate pricing for this query, then move back to on-demand.
B. Use the command line to run a dry run query to estimate the number of bytes rea
C. Then convert that bytes estimate to dollars using the Pricing Calculator.
D. Use the command line to run a dry run query to estimate the number of bytes returne
E. Then convert that bytes estimate to dollars using the Pricing Calculator.
F. Run a select count (*) to get an idea of how many records your query will look throug
G. Then convert that number of rows to dollars using the Pricing Calculator.

Answer: B

NEW QUESTION 290
You have designed a solution on Google Cloud Platform (GCP) that uses multiple GCP products. Your company has asked you to estimate the costs of the solution. You need to provide estimates for the monthly total cost. What should you do?

A. For each GCP product in the solution, review the pricing details on the products pricing pag

B. Use the pricing calculator to total the monthly costs for each GCP product.
C. For each GCP product in the solution, review the pricing details on the products pricing pag
D. Create a Google Sheet that summarizes the expected monthly costs for each product.
E. Provision the solution on GC
F. Leave the solution provisioned for 1 wee
G. Navigate to the Billing Report page in the Google Cloud Platform Consol
H. Multiply the 1 week cost to determine the monthly costs.
I. Provision the solution on GC
J. Leave the solution provisioned for 1 wee
K. Use Stackdriver to determine the provisioned and used resource amount
L. Multiply the 1 week cost to determine the monthly costs.

Answer: A

Explanation:
You can use the Google Cloud Pricing Calculator to total the estimated monthly costs for each GCP product. You dont incur any charges for doing so.
Ref: https://cloud.google.com/products/calculator

NEW QUESTION 293
You are managing a Data Warehouse on BigQuery. An external auditor will review your company's processes, and multiple external consultants will need view access to the data. You need to provide them with view access while following Google-recommended practices. What should you do?

A. Grant each individual external consultant the role of BigQuery Editor
B. Grant each individual external consultant the role of BigQuery Viewer
C. Create a Google Group that contains the consultants and grant the group the role of BigQuery Editor
D. Create a Google Group that contains the consultants, and grant the group the role of BigQuery Viewer

Answer: D

NEW QUESTION 294
Your Dataproc cluster runs in a single Virtual Private Cloud (VPC) network in a single subnet with range 172.16.20.128/25. There are no private IP addresses available in the VPC network. You want to add new VMs to communicate with your cluster using the minimum number of steps. What should you do?

A. Modify the existing subnet range to 172.16.20.0/24.
B. Create a new Secondary IP Range in the VPC and configure the VMs to use that range.
C. Create a new VPC network for the VM
D. Enable VPC Peering between the VMs' VPC network and the Dataproc cluster VPC network.
E. Create a new VPC network for the VMs with a subnet of 172.32.0.0/16. Enable VPC network Peering between the Dataproc VPC network and the VMs VPC networ
F. Configure a custom Route exchange.

Answer: A

Explanation:
/25:
CIDR to IP Range Result
CIDR Range 172.16.20.128/25 Netmask 255.255.255.128
Wildcard Bits 0.0.0.127
First IP 172.16.20.128
First IP (Decimal) 2886734976 Last IP 172.16.20.255
Last IP (Decimal) 2886735103 Total Host 128
CIDR 172.16.20.128/25
/24:
CIDR to IP Range Result
CIDR Range 172.16.20.128/24 Netmask 255.255.255.0
Wildcard Bits 0.0.0.255
First IP 172.16.20.0
First IP (Decimal) 2886734848 Last IP 172.16.20.255
Last IP (Decimal) 2886735103 Total Host 256
CIDR 172.16.20.128/24

NEW QUESTION 298
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