Google

Exam Questions Professional-Cloud-Architect

Google Certified Professional - Cloud Architect (GCP)

NEW QUESTION 1
- (Exam Topic 1)
For this question, refer to the Mountkirk Games case study.
Mountkirk Games has deployed their new backend on Google Cloud Platform (GCP). You want to create a thorough testing process for new versions of the backend before they are released to the public. You want the testing environment to scale in an economical way. How should you design the process?

A. Create a scalable environment in GCP for simulating production load.
B. Use the existing infrastructure to test the GCP-based backend at scale.
C. Build stress tests into each component of your application using resources internal to GCP to simulate load.
D. Create a set of static environments in GCP to test different levels of load — for example, high, medium, and low.

Answer: A

Explanation:
From scenario: Requirements for Game Backend Platform
➤ Dynamically scale up or down based on game activity
➤ Connect to a managed NoSQL database service
➤ Run customize Linux distro

NEW QUESTION 2
- (Exam Topic 1)
For this question, refer to the Mountkirk Games case study.
Mountkirk Games wants you to design their new testing strategy. How should the test coverage differ from their existing backends on the other platforms?

A. Tests should scale well beyond the prior approaches.
B. Unit tests are no longer required, only end-to-end tests.
C. Tests should be applied after the release is in the production environment.
D. Tests should include directly testing the Google Cloud Platform (GCP) infrastructure.

Answer: A

Explanation:
From Scenario:
A few of their games were more popular than expected, and they had problems scaling their application servers, MySQL databases, and analytics tools.
Requirements for Game Analytics Platform include: Dynamically scale up or down based on game activity

NEW QUESTION 3
- (Exam Topic 1)
For this question, refer to the Mountkirk Games case study.
Mountkirk Games wants to set up a continuous delivery pipeline. Their architecture includes many small services that they want to be able to update and roll back quickly. Mountkirk Games has the following requirements:
• Services are deployed redundantly across multiple regions in the US and Europe.
• Only frontend services are exposed on the public internet.
• They can provide a single frontend IP for their fleet of services.
• Deployment artifacts are immutable. Which set of products should they use?

A. Google Cloud Storage, Google Cloud Dataflow, Google Compute Engine
B. Google Cloud Storage, Google App Engine, Google Network Load Balancer
C. Google Kubernetes Registry, Google Container Engine, Google HTTP(S) Load Balancer
D. Google Cloud Functions, Google Cloud Pub/Sub, Google Cloud Deployment Manager

Answer: C

NEW QUESTION 4
- (Exam Topic 2)
For this question, refer to the TerramEarth case study.
The TerramEarth development team wants to create an API to meet the company's business requirements. You want the development team to focus their development effort on business value versus creating a custom framework. Which method should they use?

A. Use Google App Engine with Google Cloud Endpoint
B. Focus on an API for dealers and partners.
C. Use Google App Engine with a JAX-RS Jersey Java-based framewor
D. Focus on an API for the public.
E. Use Google App Engine with the Swagger (open API Specification) framewor
F. Focus on an API for the public.
G. Use Google Container Engine with a Django Python containe
H. Focus on an API for the public.
I. Use Google Container Engine with a Tomcat container with the Swagger (Open API Specification) framewor
J. Focus on an API for dealers and partners.

Answer: A

Explanation:
https://cloud.google.com/endpoints/docs/openapi/about-cloud-endpoints?hl=en_US&_ga=2.21787131.-1712523
https://cloud.google.com/endpoints/docs/openapi/architecture-overview
https://cloud.google.com/storage/docs/gsutil/commands/test
Develop, deploy, protect and monitor your APIs with Google Cloud Endpoints. Using an Open API Specification or one of our API frameworks, Cloud Endpoints

gives you the tools you need for every phase of API development.
From scenario: Business Requirements
Decrease unplanned vehicle downtime to less than 1 week, without increasing the cost of carrying surplus inventory
Support the dealer network with more data on how their customers use their equipment to better position new products and services
Have the ability to partner with different companies – especially with seed and fertilizer suppliers in the fast-growing agricultural business – to create compelling joint offerings for their customers.
Reference: https://cloud.google.com/certification/guides/cloud-architect/casestudy-terramearth

NEW QUESTION 5
- (Exam Topic 2)
Your agricultural division is experimenting with fully autonomous vehicles.
You want your architecture to promote strong security during vehicle operation. Which two architecture should you consider?
Choose 2 answers:

A. Treat every micro service call between modules on the vehicle as untrusted.
B. Require IPv6 for connectivity to ensure a secure address space.
C. Use a trusted platform module (TPM) and verify firmware and binaries on boot.
D. Use a functional programming language to isolate code execution cycles.
E. Use multiple connectivity subsystems for redundancy.
F. Enclose the vehicle's drive electronics in a Faraday cage to isolate chips.

Answer: AC

NEW QUESTION 6
- (Exam Topic 4)
The current Dress4win system architecture has high latency to some customers because it is located in one data center.
As of a future evaluation and optimizing for performance in the cloud, Dresss4win wants to distribute it's system architecture to multiple locations when Google cloud platform. Which approach should they use?

A. Use regional managed instance groups and a global load balancer to increase performance because the regional managed instance group can grow instances in each region separately based on traffic.
B. Use a global load balancer with a set of virtual machines that forward the requests to a closer group ofvirtual machines managed by your operations team.
C. Use regional managed instance groups and a global load balancer to increase reliability by providing automatic failover between zones in different regions.
D. Use a global load balancer with a set of virtual machines that forward the requests to a closer group of virtual machines as part of a separate managed instance groups.

Answer: A

NEW QUESTION 7
- (Exam Topic 5)
Your company just finished a rapid lift and shift to Google Compute Engine for your compute needs. You have another 9 months to design and deploy a more cloud-native solution. Specifically, you want a system that is no-ops and auto-scaling. Which two compute products should you choose? Choose 2 answers

A. Compute Engine with containers
B. Google Kubernetes Engine with containers
C. Google App Engine Standard Environment
D. Compute Engine with custom instance types
E. Compute Engine with managed instance groups

Answer: BC

Explanation:
B: With Container Engine, Google will automatically deploy your cluster for you, update, patch, secure the nodes.
Kubernetes Engine's cluster autoscaler automatically resizes clusters based on the demands of the workloads you want to run.
C: Solutions like Datastore, BigQuery, AppEngine, etc are truly NoOps.
App Engine by default scales the number of instances running up and down to match the load, thus providing consistent performance for your app at all times while minimizing idle instances and thus reducing cost.
Note: At a high level, NoOps means that there is no infrastructure to build out and manage during usage of the platform. Typically, the compromise you make with NoOps is that you lose control of the underlying infrastructure.
References:
https://www.quora.com/How-well-does-Google-Container-Engine-support-Google-Cloud-Platform%E2%80%9

NEW QUESTION 8
- (Exam Topic 5)
You need to ensure reliability for your application and operations by supporting reliable task a scheduling for compute on GCP. Leveraging Google best practices, what should you do?

A. Using the Cron service provided by App Engine, publishing messages directly to a message-processing utility service running on Compute Engine instances.
B. Using the Cron service provided by App Engine, publish messages to a Cloud Pub/Sub topi
C. Subscribe to that topic using a message-processing utility service running on Compute Engine instances.
D. Using the Cron service provided by Google Kubernetes Engine (GKE), publish messages directly to a message-processing utility service running on Compute Engine instances.
E. Using the Cron service provided by GKE, publish messages to a Cloud Pub/Sub topi
F. Subscribe to that topic using a message-processing utility service running on Compute Engine instances.

Answer: B

Explanation:
https://cloud.google.com/solutions/reliable-task-scheduling-compute-engine

NEW QUESTION 9
- (Exam Topic 5)
Your customer is receiving reports that their recently updated Google App Engine application is taking approximately 30 seconds to load for some of their users. This behavior was not reported before the update. What strategy should you take?

A. Work with your ISP to diagnose the problem.
B. Open a support ticket to ask for network capture and flow data to diagnose the problem, then roll back your application.
C. Roll back to an earlier known good release initially, then use Stackdriver Trace and logging to diagnose the problem in a development/test/staging environment.
D. Roll back to an earlier known good release, then push the release again at a quieter period to investigate.Then use Stackdriver Trace and logging to diagnose the problem.

Answer: C

Explanation:
Stackdriver Logging allows you to store, search, analyze, monitor, and alert on log data and events from Google Cloud Platform and Amazon Web Services (AWS). Our API also allows ingestion of any custom log data from any source. Stackdriver Logging is a fully managed service that performs at scale and can ingest application and system log data from thousands of VMs. Even better, you can analyze all that log data in real time.
References: https://cloud.google.com/logging/

NEW QUESTION 10
- (Exam Topic 5)
You are using Cloud CDN to deliver static HTTP(S) website content hosted on a Compute Engine instance group. You want to improve the cache hit ratio. What should you do?

A. Customize the cache keys to omit the protocol from the key.
B. Shorten the expiration time of the cached objects.
C. Make sure the HTTP(S) header "Cache-Region" points to the closest region of your users.
D. Replicate the static content in a Cloud Storage bucke
E. Point CloudCDN toward a load balancer on that bucket.

Answer: A

Explanation:
Reference https://cloud.google.com/cdn/docs/bestpractices#using_custom_cache_keys_to_improve_cache_hit_ratio

NEW QUESTION 10
- (Exam Topic 5)
You want to make a copy of a production Linux virtual machine in the US-Central region. You want to manage and replace the copy easily if there are changes on the production virtual machine. You will deploy the copy as a new instances in a different project in the US-East region. What steps must you take?

A. Use the Linux dd and netcat command to copy and stream the root disk contents to a new virtual machine instance in the US-East region.
B. Create a snapshot of the root disk and select the snapshot as the root disk when you create a new virtual machine instance in the US-East region.
C. Create an image file from the root disk with Linux dd command, create a new disk from the image file, and use it to create a new virtual machine instance in the US-East region
D. Create a snapshot of the root disk, create an image file in Google Cloud Storage from the snapshot, and create a new virtual machine instance in the US-East region using the image file for the root disk.

Answer: D

Explanation:
https://stackoverflow.com/questions/36441423/migrate-google-compute-engine-instance-to-a-different-region

NEW QUESTION 12
- (Exam Topic 5)
Your company wants to try out the cloud with low risk. They want to archive approximately 100 TB of their log data to the cloud and test the analytics features available to them there, while also retaining that data as a long-term disaster recovery backup. Which two steps should they take? Choose 2 answers

A. Load logs into Google BigQuery.
B. Load logs into Google Cloud SQL.
C. Import logs into Google Stackdriver.
D. Insert logs into Google Cloud Bigtable.
E. Upload log files into Google Cloud Storage.

Answer: AE

NEW QUESTION 17
- (Exam Topic 5)
You are building a continuous deployment pipeline for a project stored in a Git source repository and want to ensure that code changes can be verified deploying to production. What should you do?

A. Use Spinnaker to deploy builds to production using the red/black deployment strategy so that changes can easily be rolled back.
B. Use Spinnaker to deploy builds to production and run tests on production deployments.
C. Use Jenkins to build the staging branches and the master branc
D. Build and deploy changes to production for 10% of users before doing a complete rollout.
E. Use Jenkins to monitor tags in the repositor
F. Deploy staging tags to a staging environment for testing.After testing, tag the repository for production and deploy that to the production environment.

Answer: D

Explanation:
Reference: https://github.com/GoogleCloudPlatform/continuous-deployment-on-kubernetes/blob/master/ README.md

NEW QUESTION 18
- (Exam Topic 5)
You are using Cloud Shell and need to install a custom utility for use in a few weeks. Where can you store the file so it is in the default execution path and persists across sessions?

A. ~/bin
B. Cloud Storage
C. /google/scripts
D. /usr/local/bin

Answer: D

Explanation:
https://medium.com/google-cloud/no-localhost-no-problem-using-google-cloud-shell-as-my-full-time-developm

NEW QUESTION 19
- (Exam Topic 5)
A lead engineer wrote a custom tool that deploys virtual machines in the legacy data center. He wants to migrate the custom tool to the new cloud environment
You want to advocate for the adoption of Google Cloud Deployment Manager What are two business risks of migrating to Cloud Deployment Manager? Choose 2 answers

A. Cloud Deployment Manager uses Python.
B. Cloud Deployment Manager APIs could be deprecated in the future.
C. Cloud Deployment Manager is unfamiliar to the company's engineers.
D. Cloud Deployment Manager requires a Google APIs service account to run.
E. Cloud Deployment Manager can be used to permanently delete cloud resources.
F. Cloud Deployment Manager only supports automation of Google Cloud resources.

Answer: CF

Explanation:
https://cloud.google.com/deployment-manager/docs/deployments/deleting-deployments

NEW QUESTION 23
- (Exam Topic 5)
You want your Google Kubernetes Engine cluster to automatically add or remove nodes based on CPUload. What should you do?

A. Configure a HorizontalPodAutoscaler with a target CPU usag
B. Enable the Cluster Autoscaler from the GCP Console.
C. Configure a HorizontalPodAutoscaler with a target CPU usag
D. Enable autoscaling on the managed instance group for the cluster using the gcloud command.
E. Create a deployment and set the maxUnavailable and maxSurge propertie
F. Enable the Cluster Autoscaler using the gcloud command.
G. Create a deployment and set the maxUnavailable and maxSurge propertie
H. Enable autoscaling on the cluster managed instance group from the GCP Console.

Answer: B

NEW QUESTION 25
- (Exam Topic 5)
You created a pipeline that can deploy your source code changes to your infrastructure in instance groups for self healing.
One of the changes negatively affects your key performance indicator. You are not sure how to fix it and investigation could take up to a week. What should you do

A. Log in to a server, and iterate a fix locally
B. Change the instance group template to the previous one, and delete all instances.
C. Revert the source code change and rerun the deployment pipeline
D. Log into the servers with the bad code change, and swap in the previous code

Answer: C

NEW QUESTION 29
- (Exam Topic 5)
Your customer is moving their corporate applications to Google Cloud Platform. The security team wants detailed visibility of all projects in the organization. You provision the Google Cloud Resource Manager and set up yourself as the org admin. What Google Cloud Identity and Access Management (Cloud IAM) roles should you give to the security team'?

A. Org viewer, project owner
B. Org viewer, project viewer
C. Org admin, project browser
D. Project owner, network admin

Answer: B

Explanation:

https://cloud.google.com/iam/docs/using-iam-securely

NEW QUESTION 31
- (Exam Topic 5)
Your company's test suite is a custom C++ application that runs tests throughout each day on Linux virtual machines. The full test suite takes several hours to complete, running on a limited number of on premises servers reserved for testing. Your company wants to move the testing infrastructure to the cloud, to reduce the amount of time it takes to fully test a change to the system, while changing the tests as little as possible. Which cloud infrastructure should you recommend?

A. Google Compute Engine unmanaged instance groups and Network Load Balancer
B. Google Compute Engine managed instance groups with auto-scaling
C. Google Cloud Dataproc to run Apache Hadoop jobs to process each test
D. Google App Engine with Google Stackdriver for logging

Answer: B

Explanation:
https://cloud.google.com/compute/docs/instance-groups/
Google Compute Engine enables users to launch virtual machines (VMs) on demand. VMs can be launched from the standard images or custom images created by users.
Managed instance groups offer autoscaling capabilities that allow you to automatically add or remove instances from a managed instance group based on increases or decreases in load. Autoscaling helps your applications gracefully handle increases in traffic and reduces cost when the need for resources is lower.

NEW QUESTION 35
- (Exam Topic 5)
The application reliability team at your company has added a debug feature to their backend service to send all server events to Google Cloud Storage for eventual analysis. The event records are at least 50 KB and at most 15 MB and are expected to peak at 3,000 events per second. You want to minimize data loss. Which process should you implement?

A. • Append metadata to file body.• Compress individual files.• Name files with serverName-Timestamp.• Create a new bucket if bucket is older than 1 hour and save individual files to the new bucke
B. Otherwise, save files to existing bucket
C. • Batch every 10,000 events with a single manifest file for metadata.• Compress event files and manifest file into a single archive file.• Name files using serverName-EventSequence.• Create a new bucket if bucket is older than 1 day and save the single archive file to the new bucke
D. Otherwise, save the single archive file to existing bucket.
E. • Compress individual files.• Name files with serverName-EventSequence.• Save files to one bucket• Set custom metadata headers for each object after saving.
F. • Append metadata to file body.• Compress individual files.• Name files with a random prefix pattern.• Save files to one bucket

Answer: D

Explanation:
In order to maintain a high request rate, avoid using sequential names. Using completely random object names will give you the best load distribution. Randomness after a common prefix is effective under the prefix https://cloud.google.com/storage/docs/request-rate

NEW QUESTION 40
- (Exam Topic 5)
You are tasked with building an online analytical processing (OLAP) marketing analytics and reporting tool. This requires a relational database that can operate on hundreds of terabytes of data. What is the Google
recommended tool for such applications?

A. Cloud Spanner, because it is globally distributed
B. Cloud SQL, because it is a fully managed relational database
C. Cloud Firestore, because it offers real-time synchronization across devices
D. BigQuery, because it is designed for large-scale processing of tabular data

Answer: A

Explanation:
Reference: https://cloud.google.com/files/BigQueryTechnicalWP.pdf

NEW QUESTION 45
- (Exam Topic 5)
You want to enable your running Google Container Engine cluster to scale as demand for your application changes.
What should you do?

A. Add additional nodes to your Container Engine cluster using the following command: gcloud container clusters resize CLUSTER_NAME --size 10
B. Add a tag to the instances in the cluster with the following command:gcloud compute instances add-tags INSTANCE --tags enable --autoscaling max-nodes-10
C. Update the existing Container Engine cluster with the following command:gcloud alpha container clusters update mycluster --enable-autoscaling --min-nodes=1 --max-nodes=10
D. Create a new Container Engine cluster with the following command:gcloud alpha container clusters create mycluster --enable-autocaling --min-nodes=1 --max-nodes=10 and redeploy your application.

Answer: B

Explanation:
https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler Cluster autoscaling
--enable-autoscaling
Enables autoscaling for a node pool.
Enables autoscaling in the node pool specified by --node-pool or the default node pool if --node-pool is not provided.

Where:
--max-nodes=MAX_NODES
Maximum number of nodes in the node pool.
Maximum number of nodes to which the node pool specified by --node-pool (or default node pool if unspecified) can scale.

NEW QUESTION 50
- (Exam Topic 5)
A development manager is building a new application He asks you to review his requirements and identify what cloud technologies he can use to meet them. The application must
* 1. Be based on open-source technology for cloud portability
* 2. Dynamically scale compute capacity based on demand
* 3. Support continuous software delivery
* 4. Run multiple segregated copies of the same application stack
* 5. Deploy application bundles using dynamic templates
* 6. Route network traffic to specific services based on URL
Which combination of technologies will meet all of his requirements?

A. Google Container Engine, Jenkins, and Helm
B. Google Container Engine and Cloud Load Balancing
C. Google Compute Engine and Cloud Deployment Manager
D. Google Compute Engine, Jenkins, and Cloud Load Balancing

Answer: A

Explanation:
Helm for managing Kubernetes
Kubernetes can base on the URL to route traffic to different location (path) https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer eg.apiVersion: networking.k8s.io/v1beta1
kind: Ingress metadata:
name: fanout-ingress spec:
rules:
- http: paths:
- path: /* backend: serviceName: web servicePort: 8080
- path: /v2/* backend: serviceName: web2 servicePort: 8080

NEW QUESTION 54
- (Exam Topic 5)
Your company creates rendering software which users can download from the company website. Your company has customers all over the world. You want to minimize latency for all your customers. You want to follow Google-recommended practices.
How should you store the files?

A. Save the files in a Multi-Regional Cloud Storage bucket.
B. Save the files in a Regional Cloud Storage bucket, one bucket per zone of the region.
C. Save the files in multiple Regional Cloud Storage buckets, one bucket per zone per region.
D. Save the files in multiple Multi-Regional Cloud Storage buckets, one bucket per multi-region.

Answer: A

Explanation:
https://cloud.google.com/storage/docs/locations#location-mr

NEW QUESTION 58
- (Exam Topic 5)
You have an application deployed on Kubernetes Engine using a Deployment named echo-deployment. The deployment is exposed using a Service called echo-service. You need to perform an update to the application with minimal downtime to the application. What should you do?

A. Use kubect1 set image deployment/echo-deployment <new-image>
B. Use the rolling update functionality of the Instance Group behind the Kubernetes cluster
C. Update the deployment yaml file with the new container imag
D. Use kubect1 delete deployment/ echo-deployment and kubect1 create –f <yaml-file>
E. Update the service yaml file which the new container imag
F. Use kubect1 delete service/echoservice and kubect1 create –f <yaml-file>

Answer: A

Explanation:
https://cloud.google.com/kubernetes-engine/docs/how-to/updating-apps#updating_an_application

NEW QUESTION 62
- (Exam Topic 5)
You need to design a solution for global load balancing based on the URL path being requested. You need to ensure operations reliability and end-to-end in-transit encryption based on Google best practices.
What should you do?

A. Create a cross-region load balancer with URL Maps.
B. Create an HTTPS load balancer with URL maps.
C. Create appropriate instance groups and instance
D. Configure SSL proxy load balancing.
E. Create a global forwarding rul

F. Configure SSL proxy balancing.

Answer: B

Explanation:
Reference https://cloud.google.com/load-balancing/docs/https/url-map

NEW QUESTION 67
- (Exam Topic 5)
You are developing a globally scaled frontend for a legacy streaming backend data API. This API expects events in strict chronological order with no repeat data for proper processing.
Which products should you deploy to ensure guaranteed-once FIFO (first-in, first-out) delivery of data?

A. Cloud Pub/Sub alone
B. Cloud Pub/Sub to Cloud DataFlow
C. Cloud Pub/Sub to Stackdriver
D. Cloud Pub/Sub to Cloud SQL

Answer: B

Explanation:
Reference https://cloud.google.com/pubsub/docs/ordering

NEW QUESTION 72
- (Exam Topic 5)
You set up an autoscaling instance group to serve web traffic for an upcoming launch. After configuring the instance group as a backend service to an HTTP(S) load balancer, you notice that virtual machine (VM) instances are being terminated and re-launched every minute. The instances do not have a public IP address. You have verified the appropriate web response is coming from each instance using the curl command. You want to ensure the backend is configured correctly. What should you do?

A. Ensure that a firewall rule exists to allow source traffic on HTTP/HTTPS to reach the load balancer.
B. Assign a public IP to each instance and configure a firewall rule to allow the load balancer to reach the instance public IP.
C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.
D. Create a tag on each instance with the name of the load balance
E. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.

Answer: C

Explanation:
https://cloud.google.com/vpc/docs/using-firewalls
The best practice when configuration a health check is to check health and serve traffic on the same port. However, it is possible to perform health checks on one port, but serve traffic on another. If you do use two different ports, ensure that firewall rules and services running on instances are configured appropriately. If you run health checks and serve traffic on the same port, but decide to switch ports at some point, be sure to update both the backend service and the health check. Backend services that do not have a valid global forwarding rule referencing it will not be health checked and will have no health status.
References: https://cloud.google.com/compute/docs/load-balancing/http/backend-service

NEW QUESTION 77
- (Exam Topic 5)
Your organization wants to control IAM policies for different departments independently, but centrally. Which approach should you take?

A. Multiple Organizations with multiple Folders
B. Multiple Organizations, one for each department
C. A single Organization with Folder for each department
D. A single Organization with multiple projects, each with a central owner

Answer: C

Explanation:
Folders are nodes in the Cloud Platform Resource Hierarchy. A folder can contain projects, other folders, or a combination of both. You can use folders to group projects under an organization in a hierarchy. For example, your organization might contain multiple departments, each with its own set of GCP resources. Folders allow you to group these resources on a per-department basis. Folders are used to group resources that share common IAM policies. While a folder can contain multiple folders or resources, a given folder or resource can have exactly one parent.
References: https://cloud.google.com/resource-manager/docs/creating-managing-folders

NEW QUESTION 82
- (Exam Topic 5)
Your customer wants to capture multiple GBs of aggregate real-time key performance indicators (KPIs) from their game servers running on Google Cloud Platform and monitor the KPIs with low latency. How should they capture the KPIs?

A. Store time-series data from the game servers in Google Bigtable, and view it using Google Data Studio.
B. Output custom metrics to Stackdriver from the game servers, and create a Dashboard in Stackdriver Monitoring Console to view them.
C. Schedule BigQuery load jobs to ingest analytics files uploaded to Cloud Storage every ten minutes, and visualize the results in Google Data Studio.
D. Insert the KPIs into Cloud Datastore entities, and run ad hoc analysis and visualizations of them inCloud Datala

Answer: A

Explanation:
https://cloud.google.com/monitoring/api/v3/metrics-details#metric-kinds

NEW QUESTION 86
- (Exam Topic 5)
Your marketing department wants to send out a promotional email campaign. The development team wants to minimize direct operation management. They project a wide range of possible customer responses, from 100 to 500,000 click-throughs per day. The link leads to a simple website that explains the promotion and collects user information and preferences. Which infrastructure should you recommend? (CHOOSE TWO)

A. Use Google App Engine to serve the website and Google Cloud Datastore to store user data.
B. Use a Google Container Engine cluster to serve the website and store data to persistent disk.
C. Use a managed instance group to serve the website and Google Cloud Bigtable to store user data.
D. Use a single compute Engine virtual machine (VM) to host a web server, backed by Google Cloud SQL.

Answer: AC

Explanation:
Reference: https://cloud.google.com/storage-options/ References: https://cloud.google.com/storage-options/

NEW QUESTION 91
- (Exam Topic 5)
You are analyzing and defining business processes to support your startup's trial usage of GCP, and you don't yet know what consumer demand for your product will be. Your manager requires you to minimize GCP service costs and adhere to Google best practices. What should you do?

A. Utilize free tier and sustained use discount
B. Provision a staff position for service cost management.
C. Utilize free tier and sustained use discount
D. Provide training to the team about service cost management.
E. Utilize free tier and committed use discount
F. Provision a staff position for service cost management.
G. Utilize free tier and committed use discount
H. Provide training to the team about service cost management.

Answer: D

Explanation:
https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#billing_and_management

NEW QUESTION 95
- (Exam Topic 5)
A production database virtual machine on Google Compute Engine has an ext4-formatted persistent disk for data files The database is about to run out of storage space How can you remediate the problem with the least amount of downtime?

A. In the Cloud Platform Console, increase the size of the persistent disk and use the resize2fs command in Linux.
B. Shut down the virtual machine, use the Cloud Platform Console to increase the persistent disk size, then restart the virtual machine.
C. In the Cloud Platform Console, increase the size of the persistent disk and verify the new space is ready to use with the fdisk command in Linux.
D. In the Cloud Platform Console, create a new persistent disk attached to the virtual machine, format and mount it, and configure the database service to move the files to the new disk.
E. In the Cloud Platform Console, create a snapshot of the persistent disk, restore the snapshot to a new larger disk, unmount the old disk, mount the new disk, and restart the database service.

Answer: A

Explanation:
On Linux instances, connect to your instance and manually resize your partitions and file systems to use the additional disk space that you added.
Extend the file system on the disk or the partition to use the added space. If you grew a partition on your disk, specify the partition. If your disk does not have a partition table, specify only the disk ID.
sudo resize2fs /dev/[DISK_ID][PARTITION_NUMBER]
where [DISK_ID] is the device name and [PARTITION_NUMBER] is the partition number for the device where you are resizing the file system.
References: https://cloud.google.com/compute/docs/disks/add-persistent-disk

NEW QUESTION 96
- (Exam Topic 5)
You need to upload files from your on-premises environment to Cloud Storage. You want the files to be encrypted on Cloud Storage using customer-supplied encryption keys. What should you do?

A. Supply the encryption key in a .boto configuration fil
B. Use gsutil to upload the files.
C. Supply the encryption key using gcloud confi
D. Use gsutil to upload the files to that bucket.
E. Use gsutil to upload the files, and use the flag --encryption-key to supply the encryption key.
F. Use gsutil to create a bucket, and use the flag --encryption-key to supply the encryption ke
G. Use gsutil to upload the files to that bucket.

Answer: A

Explanation:
https://cloud.google.com/storage/docs/encryption/customer-supplied-keys#gsutil

NEW QUESTION 101
- (Exam Topic 5)

You need to develop procedures to verify resilience of disaster recovery for remote recovery using GCP. Your production environment is hosted on-premises. You need to establish a secure, redundant connection between your on premises network and the GCP network.
What should you do?

A. Verify that Dedicated Interconnect can replicate files to GC
B. Verify that direct peering can establish a secure connection between your networks if Dedicated Interconnect fails.
C. Verify that Dedicated Interconnect can replicate files to GC
D. Verify that Cloud VPN can establish a secure connection between your networks if Dedicated Interconnect fails.
E. Verify that the Transfer Appliance can replicate files to GC
F. Verify that direct peering can establish a secure connection between your networks if the Transfer Appliance fails.
G. Verify that the Transfer Appliance can replicate files to GC
H. Verify that Cloud VPN can establish a secure connection between your networks if the Transfer Appliance fails.

Answer: B

Explanation:
https://cloud.google.com/interconnect/docs/how-to/direct-peering

NEW QUESTION 102
- (Exam Topic 5)
As part of implementing their disaster recovery plan, your company is trying to replicate their production MySQL database from their private data center to their GCP project using a Google Cloud VPN connection. They are experiencing latency issues and a small amount of packet loss that is disrupting the replication. What should they do?

A. Configure their replication to use UDP.
B. Configure a Google Cloud Dedicated Interconnect.
C. Restore their database daily using Google Cloud SQL.
D. Add additional VPN connections and load balance them.
E. Send the replicated transaction to Google Cloud Pub/Sub.

Answer: B

NEW QUESTION 104
- (Exam Topic 5)
You have an outage in your Compute Engine managed instance group: all instance keep restarting after 5 seconds. You have a health check configured, but autoscaling is disabled. Your colleague, who is a Linux expert, offered to look into the issue. You need to make sure that he can access the VMs. What should you do?

A. Grant your colleague the IAM role of project Viewer
B. Perform a rolling restart on the instance group
C. Disable the health check for the instance grou
D. Add his SSH key to the project-wide SSH keys
E. Disable autoscaling for the instance grou
F. Add his SSH key to the project-wide SSH Keys

Answer: C

Explanation:
https://cloud.google.com/compute/docs/instance-groups/autohealing-instances-in-migs
Health checks used for autohealing should be conservative so they don't preemptively delete and recreate your instances. When an autohealer health check is too aggressive, the autohealer might mistake busy instances for failed instances and unnecessarily restart them, reducing availability

NEW QUESTION 106
- (Exam Topic 5)
You need to evaluate your team readiness for a new GCP project. You must perform the evaluation and create a skills gap plan incorporates the business goal of cost optimization. Your team has deployed two GCP projects successfully to date. What should you do?

A. Allocate budget for team trainin
B. Set a deadline for the new GCP project.
C. Allocate budget for team trainin
D. Create a roadmap for your team to achieve Google Cloud certification based on job role.
E. Allocate budget to hire skilled external consultant
F. Set a deadline for the new GCP project.
G. Allocate budget to hire skilled external consultant
H. Create a roadmap for your team to achieve Google Cloud certification based on job role.

Answer: B

Explanation:
https://services.google.com/fh/files/misc/cloud_center_of_excellence.pdf

NEW QUESTION 109
- (Exam Topic 5)
You need to set up Microsoft SQL Server on GCP. Management requires that there's no downtime in case of a data center outage in any of the zones within a GCP region. What should you do?

A. Configure a Cloud SQL instance with high availability enabled.
B. Configure a Cloud Spanner instance with a regional instance configuration.
C. Set up SQL Server on Compute Engine, using Always On Availability Groups using Windows Failover Clusterin

D. Place nodes in different subnets.
E. Set up SQL Server Always On Availability Groups using Windows Failover Clusterin
F. Place nodes in different zones.

Answer: D

Explanation:
https://cloud.google.com/sql/docs/sqlserver/configure-ha

NEW QUESTION 113
- (Exam Topic 5)
You have been engaged by your client to lead the migration of their application infrastructure to GCP. One of their current problems is that the on-premises high performance SAN is requiring frequent and expensive upgrades to keep up with the variety of workloads that are identified as follows: 20TB of log archives retained for legal reasons; 500 GB of VM boot/data volumes and templates; 500 GB of image thumbnails; 200 GB of customer session state data that allows customers to restart sessions even if off-line for several days.
Which of the following best reflects your recommendations for a cost-effective storage allocation?

A. Local SSD for customer session state dat
B. Lifecycle-managed Cloud Storage for log archives, thumbnails, and VM boot/data volumes.
C. Memcache backed by Cloud Datastore for the customer session state dat
D. Lifecycle- managed Cloud Storage for log archives, thumbnails, and VM boot/data volumes.
E. Memcache backed by Cloud SQL for customer session state dat
F. Assorted local SSD-backed instances for VM boot/data volume
G. Cloud Storage for log archives and thumbnails.
H. Memcache backed by Persistent Disk SSD storage for customer session state dat
I. Assorted local SSDbacked instances for VM boot/data volume
J. Cloud Storage for log archives and thumbnails.

Answer: D

Explanation:
https://cloud.google.com/compute/docs/disks

NEW QUESTION 116
- (Exam Topic 5)
Your BigQuery project has several users. For audit purposes, you need to see how many queries each user ran in the last month.

A. Connect Google Data Studio to BigQuer
B. Create a dimension for the users and a metric for the amount of queries per user.
C. In the BigQuery interface, execute a query on the JOBS table to get the required information.
D. Use 'bq show' to list all job
E. Per job, use 'bq Is' to list job information and get the required information.
F. Use Cloud Audit Logging to view Cloud Audit Logs, and create a filter on the query operation to get the required information.

Answer: C

Explanation:
https://cloud.google.com/bigquery/docs/managing-jobs

NEW QUESTION 118
- (Exam Topic 5)
You deploy your custom java application to google app engine. It fails to deploy and gives you the following stack trace:

```
Java.lang.securityException : SHA1 digest

At com.google.appengine.runtime.Request.pr

At

Sun.securityutil.manifestENtryVerifier.ver

At java . net . URLClassLoader . defineCla

At sun . reflect. GeneratedMethodAccessors

At

Sun.reflect . DelegatingMethodAccesorImp1.

At java . lang . reflect . MThod . invoke
```

A. Recompile the CLoakedServlet class using and MD5 hash instead of SHA1
B. Digitally sign all of your JAR files and redeploy your application.
C. Upload missing JAR files and redeploy your application

Answer: B

NEW QUESTION 119
- (Exam Topic 5)
Your company has decided to build a backup replica of their on-premises user authentication PostgreSQL database on Google Cloud Platform. The database is 4 TB, and large updates are frequent. Replication requires private address space communication. Which networking approach should you use?

A. Google Cloud Dedicated Interconnect
B. Google Cloud VPN connected to the data center network
C. A NAT and TLS translation gateway installed on-premises
D. A Google Compute Engine instance with a VPN server installed connected to the data center network

Answer: A

Explanation:
https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations
Google Cloud Dedicated Interconnect provides direct physical connections and RFC 1918 communication between your on-premises network and Google's network. Dedicated Interconnect enables you to transfer large amounts of data between networks, which can be more cost effective than purchasing additional bandwidth over the public Internet or using VPN tunnels.
Benefits:
> Traffic between your on-premises network and your VPC network doesn't traverse the public Internet.
Traffic traverses a dedicated connection with fewer hops, meaning there are less points of failure where traffic might get dropped or disrupted.
> Your VPC network's internal (RFC 1918) IP addresses are directly accessible from your on-premises network. You don't need to use a NAT device or VPN tunnel to reach internal IP addresses. Currently, you can only reach internal IP addresses over a dedicated connection. To reach Google external IP addresses, you must use a separate connection.
> You can scale your connection to Google based on your needs. Connection capacity is delivered over one or more 10 Gbps Ethernet connections, with a maximum of eight connections (80 Gbps total per interconnect).
> The cost of egress traffic from your VPC network to your on-premises network is reduced. A dedicated connection is generally the least expensive method if you have a high-volume of traffic to and from Google's network.
References: https://cloud.google.com/interconnect/docs/details/dedicated

NEW QUESTION 120
- (Exam Topic 5)
You are deploying an application on App Engine that needs to integrate with an on-premises database. For security purposes, your on-premises database must not be accessible through the public Internet. What should you do?

A. Deploy your application on App Engine standard environment and use App Engine firewall rules to limit access to the open on-premises database.
B. Deploy your application on App Engine standard environment and use Cloud VPN to limit access to the onpremises database.
C. Deploy your application on App Engine flexible environment and use App Engine firewall rules to limit access to the on-premises database.
D. Deploy your application on App Engine flexible environment and use Cloud VPN to limit access to the on-premises database.

Answer: D

Explanation:
https://cloud.google.com/appengine/docs/flexible/python/using-third-party-databases

NEW QUESTION 122
- (Exam Topic 5)
The development team has provided you with a Kubernetes Deployment file. You have no infrastructure yet and need to deploy the application. What should you do?

A. Use gcloud to create a Kubernetes cluste
B. Use Deployment Manager to create the deployment.
C. Use gcloud to create a Kubernetes cluste
D. Use kubect1 to create the deployment.
E. Use kubect1 to create a Kubernetes cluste
F. Use Deployment Manager to create the deployment.
G. Use kubect1 to create a Kubernetes cluste
H. Use kubect1 to create the deployment.

Answer: B

Explanation:
https://cloud.google.com/kubernetes-engine/docs/how-to/creating-a-cluster

NEW QUESTION 123
- (Exam Topic 5)
Your customer wants to do resilience testing of their authentication layer. This consists of a regional managed instance group serving a public REST API that reads from and writes to a Cloud SQL instance.
What should you do?

A. Engage with a security company to run web scrapes that look your users' authentication data om malicious websites and notify you if any if found.
B. Deploy intrusion detection software to your virtual machines to detect and log unauthorized access.
C. Schedule a disaster simulation exercise during which you can shut off all VMs in a zone to see how your application behaves.
D. Configure a red replica for your Cloud SQL instance in a different zone than the master, and then manually trigger a failover while monitoring KPIs for our REST API.

Answer: C

NEW QUESTION 127
- (Exam Topic 5)
You want to automate the creation of a managed instance group and a startup script to install the OS package dependencies. You want to minimize the startup time for VMs in the instance group.
What should you do?

A. Use Terraform to create the managed instance group and a startup script to install the OS package dependencies.
B. Create a custom VM image with all OS package dependencie
C. Use Deployment Manager to create the managed instance group with the VM image.
D. Use Puppet to create the managed instance group and install the OS package dependencies.
E. Use Deployment Manager to create the managed instance group and Ansible to install the OS package dependencies.

Answer: B

Explanation:
"Custom images are more deterministic and start more quickly than instances with startup scripts. However, startup scripts are more flexible and let you update the apps and settings in your instances more easily." https://cloud.google.com/compute/docs/instance-templates/create-instance-templates#using_custom_or_public_i

NEW QUESTION 132
- (Exam Topic 5)
During a high traffic portion of the day, one of your relational databases crashes, but the replica is never promoted to a master. You want to avoid this in the future.
What should you do?

A. Use a different database.
B. Choose larger instances for your database.
C. Create snapshots of your database more regularly.
D. Implement routinely scheduled failovers of your databases.

Answer: D

Explanation:
https://cloud.google.com/solutions/dr-scenarios-planning-guide

NEW QUESTION 133
- (Exam Topic 5)
Your web application must comply with the requirements of the European Union's General Data Protection Regulation (GDPR). You are responsible for the technical architecture of your web application. What should you do?

A. Ensure that your web application only uses native features and services of Google Cloud Platform,because Google already has various certifications and provides "pass-on" compliance when you use native features.
B. Enable the relevant GDPR compliance setting within the GCPConsole for each of the services in use within your application.
C. Ensure that Cloud Security Scanner is part of your test planning strategy in order to pick up any compliance gaps.
D. Define a design for the security of data in your web application that meets GDPR requirements.

Answer: D

Explanation:
https://cloud.google.com/security/gdpr/?tab=tab4
Reference: https://www.mobiloud.com/blog/gdpr-compliant-mobile-app/

NEW QUESTION 138
- (Exam Topic 5)
The database administration team has asked you to help them improve the performance of their new database server running on Google Compute Engine. The database is for importing and normalizing their performance statistics and is built with MySQL running on Debian Linux. They have an n1-standard-8 virtual machine with 80 GB of SSD persistent disk. What should they change to get better performance from this system?

A. Increase the virtual machine's memory to 64 GB.
B. Create a new virtual machine running PostgreSQL.
C. Dynamically resize the SSD persistent disk to 500 GB.
D. Migrate their performance metrics warehouse to BigQuery.
E. Modify all of their batch jobs to use bulk inserts into the database.

Answer: C

NEW QUESTION 141
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