# QUESTIONS

**1. You are a project owner and need your co-worker to deploy a new version of your application to App Engine. You want to follow Google’s recommended practices. Which IAM roles should you grant your co-worker?**

A. Project Editor

B. App Engine Service Admin

C. App Engine Deployer

D. App Engine Code Viewer

**2. Your company has reserved a monthly budget for your project. You want to be informed automatically of your project spend so that you can take action when you approach the limit. What should you do?**

A. Link a credit card with a monthly limit equal to your budget.

B. Create a budget alert for 50%, 90%, and 100% of your total monthly budget.

C. In App Engine Settings, set a daily budget at the rate of 1/30 of your monthly budget.

D. In the GCP Console, configure billing export to BigQuery. Create a saved view that queries your total spend

**3. You have a project using BigQuery. You want to list all BigQuery jobs for that project. You want to set this project as the default for the bq command-line tool. What should you do?**

A. Use “gcloud config set project” to set the default project.

B. Use “bq config set project” to set the default project.

C. Use “gcloud generate config-url” to generate a URL to the Google Cloud Platform Console to set the default project.

D. Use “bq generate config-url” to generate a URL to the Google Cloud Platform Console to set the default project.

**4. Your project has all its Compute Engine resources in the europe-west1 region. You want to set europe-west1 as the default region for gcloud commands. What should you do?**

A. Use Cloud Shell instead of the command line interface of your device. Launch Cloud Shell after you navigate to a resource in the europe-west1 region. The europe-west1 region will automatically become the default region.

B. Use “gcloud config set compute/region europe-west1” to set the default region for future gcloud commands.

C. Use “gcloud config set compute/zone europe-west1” to set the default region for future gcloud commands.

D. Create a VPN from on-premises to a subnet in europe-west1, and use that connection when executing gcloud commands

**5. You developed a new application for App Engine and are ready to deploy it to production. You need to estimate the costs of running your application on Google Cloud Platform as accurately as possible. What should you do?**

A. Create a YAML file with the expected usage. Pass this file to the “gcloud app estimate” command to get an accurate estimation.

B. Multiply the costs of your application when it was in development by the number of expected users to get an accurate estimation.

C. Use the pricing calculator for App Engine to get an accurate estimation of the expected charges.

D. Create a ticket with Google Cloud Billing Support to get an accurate estimation.

**6. Your company processes high volumes of IoT data that are time-stamped. The total data volume can be several petabytes. The data needs to be written and changed at a high speed. You want to use the most performant storage option for your data. Which product should you use?**

A. Cloud Datastore

B. Cloud Storage

C. Cloud Bigtable

D. BigQuery

**7. Your application has a large international audience and runs stateless virtual machines within a managed instance group across multiple locations. One feature of the application lets users upload files and share them with other users. Files must be available for 30 days; after that, they are removed from the system entirely. Which storage solution should you choose?**

A. A Cloud Datastore database.

B. A multi-regional Cloud Storage bucket.

C. Persistent SSD on virtual machine instances.

D. A managed instance group of Filestore servers.

**8. You have a definition for an instance template that contains a web application. You are asked to deploy the application so that it can scale based on the HTTP traffic it receives. What should you do?**

A. Create a VM from the instance template. Create a custom image from the VM’s disk. Export the image to Cloud Storage. Create an HTTP load balancer and add the Cloud Storage bucket as its backend service.

B. Create a VM from the instance template. Create an App Engine application in Automatic Scaling mode that forwards all traffic to the VM.

C. Create a managed instance group based on the instance template. Configure autoscaling based on HTTP traffic and configure the instance group as the backend service of an HTTP load balancer.

D. Create the necessary amount of instances required for peak user traffic based on the instance template. Create an unmanaged instance group and add the instances to that instance group. Configure the instance group as the Backend Service of an HTTP load balancer.

**9. You are creating a Kubernetes Engine cluster to deploy multiple pods inside the cluster. All container logs must be stored in BigQuery for later analysis. You want to follow Google-recommended practices. Which two approaches can you take?**

A. Turn on Stackdriver Logging during the Kubernetes Engine cluster creation.

B. Turn on Stackdriver Monitoring during the Kubernetes Engine cluster creation.

C. Develop a custom add-on that uses Cloud Logging API and BigQuery API. Deploy the add-on to your Kubernetes Engine cluster.

D. Use the Stackdriver Logging export feature to create a sink to Cloud Storage. Create a Cloud Dataflow job that imports log files from Cloud Storage to BigQuery.

E. Use the Stackdriver Logging export feature to create a sink to BigQuery. Specify a filter expression to export log records related to your Kubernetes Engine cluster only.

**10. You need to create a new Kubernetes Cluster on Google Cloud Platform that can autoscale the number of worker nodes. What should you do?**

A. Create a cluster on Kubernetes Engine and enable autoscaling on Kubernetes Engine.

B. Create a cluster on Kubernetes Engine and enable autoscaling on the instance group of the cluster.

C. Configure a Compute Engine instance as a worker and add it to an unmanaged instance group. Add a load balancer to the instance group and rely on the load balancer to create additional Compute Engine instances when needed.

D. Create Compute Engine instances for the workers and the master, and install Kubernetes. Rely on Kubernetes to create additional Compute Engine instances when needed.

**11. You have an application server running on Compute Engine in the europe-west1-d zone. You need to ensure high availability and replicate the server to the europe-west2-c zone using the fewest steps possible. What should you do?**

A. Create a snapshot from the disk. Create a disk from the snapshot in the europe-west2-c zone. Create a new VM with that disk.

B. Create a snapshot from the disk. Create a disk from the snapshot in the europe-west1-d zone and then move the disk to europe-west2-c. Create a new VM with that disk.

C. Use “gcloud” to copy the disk to the europe-west2-c zone. Create a new VM with that disk.

D. Use “gcloud compute instances move” with parameter “–destination-zone europe-west2-c” to move the instance to the new zone

**12. Your company has a mission-critical application that serves users globally. You need to select a transactional, relational data storage system for this application. Which two products should you consider**

A. BigQuery

B. Cloud SQL

C. Cloud Spanner

D. Cloud Bigtable

E. Cloud Datastore

**13. You have a Kubernetes cluster with 1 node-pool. The cluster receives a lot of traffic and needs to grow. You decide to add a node. What should you do?**

A. Use “gcloud container clusters resize” with the desired number of nodes.

B. Use “kubectl container clusters resize” with the desired number of nodes.

C. Edit the managed instance group of the cluster and increase the number of VMs by 1.

D. Edit the managed instance group of the cluster and enable autoscaling.

**14. You created an update for your application on App Engine. You want to deploy the update without impacting your users. You want to be able to roll back as quickly as possible if it fails. What should you do?**

A. Delete the current version of your application. Deploy the update using the same version identifier as the deleted version.

B. Notify your users of an upcoming maintenance window. Deploy the update in that maintenance window.

C. Deploy the update as the same version that is currently running.

D. Deploy the update as a new version. Migrate traffic from the current version to the new version.

**15. You have created a Kubernetes deployment, called Deployment-A, with 3 replicas on your cluster. Another deployment, called Deployment-B, needs access to Deployment-A. You cannot expose Deployment-A outside of the cluster. What should you do**?

A. Create a Service of type NodePort for Deployment A and an Ingress Resource for that Service. Have Deployment B use the Ingress IP address.

B. Create a Service of type LoadBalancer for Deployment A. Have Deployment B use the Service IP address.

C. Create a Service of type LoadBalancer for Deployment A and an Ingress Resource for that Service. Have Deployment B use the Ingress IP address.

D. Create a Service of type ClusterIP for Deployment A. Have Deployment B use the Service IP address.

**16. You need to estimate the annual cost of running a Bigquery query that is scheduled to run nightly. What should you do?**

A. Use “gcloud query –dry\_run” to determine the number of bytes read by the query. Use this number in the Pricing Calculator.

B. Use “bq query –dry\_run” to determine the number of bytes read by the query. Use this number in the Pricing Calculator.

C. Use “gcloud estimate” to determine the amount billed for a single query. Multiply this amount by 365.

D. Use “bq estimate” to determine the amount billed for a single query. Multiply this amount by 365.

**17. You want to find out who in your organization has Owner access to a project called “my-project”.What should you do?**

A. In the Google Cloud Platform Console, go to the IAM page for your organization and apply the filter “Role:Owner”.

B. In the Google Cloud Platform Console, go to the IAM page for your project and apply the filter “Role:Owner”.

C. Use “gcloud iam list-grantable-role –project my-project” from your Terminal.

D. Use “gcloud iam list-grantable-role” from Cloud Shell on the project page

**18. You want to create a new role for your colleagues that will apply to all current and future projects created in your organization. The role should have the permissions of the BigQuery Job User and Cloud Bigtable User roles. You want to follow Google’s recommended practices. How should you create the new role?**

A. Use “gcloud iam combine-roles –global” to combine the 2 roles into a new custom role.

B. For one of your projects, in the Google Cloud Platform Console under Roles, select both roles and combine them into a new custom role. Use “gcloud iam promote-role” to promote the role from a project role to an organization role.

C. For all projects, in the Google Cloud Platform Console under Roles, select both roles and combine them into a new custom role.

D. For your organization, in the Google Cloud Platform Console under Roles, select both roles and combine them into a new custom role.

**19. You work in a small company where everyone should be able to view all resources of a specific project. You want to grant them access following Google’s recommended practices. What should you do?**

A. Create a script that uses “gcloud projects add-iam-policy-binding” for all users’ email addresses and the Project Viewer role.

B. A. Create a script that uses “gcloud iam roles create” for all users’ email addresses and the Project Viewer role.

C. Create a new Google Group and add all users to the group. Use “gcloud projects add-iam-policy-binding” with the Project Viewer role and Group email address.

D. Create a new Google Group and add all members to the group. Use “gcloud iam roles create” with the Project Viewer role and Group email address.

**20. You need to verify the assigned permissions in a custom IAM role. What should you do?**

A. Use the GCP Console, IAM section to view the information.

B. Use the “gcloud init” command to view the information.

C. Use the GCP Console, Security section to view the information.

D. Use the GCP Console, API section to view the information.

**21. Which of the following services provides real-time messaging?**

A. Cloud Pub/Sub

B. Big Query

C. App Engine

D. Datastore

**22. Which of the following tasks would Nearline Storage be well suited for?**

A. A mounted Linux file system

B. Image assets for a high traffic website

C. Frequently read files

D. Infrequently read data backups

**23. Which of the following products will allow you to administer your projects through a browser based command-line?**

A. Cloud Datastore

B. Cloud Command-line

C. Cloud Terminal

D. Cloud Shell

**24. Cloud SQL is based on which database engine?**

A. Microsoft SQL Server

B. MySQL

C. Oracle

D. Informix

**25. Which of the following products will allow you to perform live debugging without stopping your application?**

A. App Engine Active Debugger (AEAD)

B. Stackdriver Debugger

C. Code Inspector

D. Pause IT

**26. Which of these options is not a valid Cloud Storage class?**

A. Glacier Storage

B. Nearline Storage

C. Coldline Storage

D. Regional Storage

**27. Regarding Cloud Storage, which option allows any user to access to a Cloud Storage resource for a limited time, using a specific URL?**

A. Open Buckets

B. Temporary Resources

C. Signed URLs

D. Temporary URLs

**28. Of the options given, which is a NoSQL database?**

A. Cloud Datastore

B. Cloud SQL

C. All of the given options

D. Cloud Storage

**29. Container Engine allows orchastration of what type of containers?**

A. Blue Whale

B. LXC

C. BSD Jails

D. Docker

**30. Regarding Cloud IAM, what type of role(s) are available?**

A. Basic roles and Compiled roles

B. Primitive roles and Predefined roles

C. Simple roles

D. Basic roles and Curated roles

**31. Which of the follow products will allow you to host a static website?**

A. Cloud SDK

B. Cloud Endpoints

C. Cloud Storage

D. Cloud Datastore

**32. Container Engine is built on which open source system?**

A. Swarm

B. Kubernetes

C. Docker Orchastrate

D. Mesos

**33. Cloud Source Repositories provide a hosted version of which version control system?**

A. Git

B. RCS

C. SVN

D. Mercurial

**34. Which of the following is an analytics data warehouse?**

A. Cloud SQL

B. Big Query

C. Datastore

D. Cloud Storage

**35. Which service offers the ability to create and run virtual machines?**

A. Google Virtualization Engine

B. Compute Containers

C. VM Engine

D. Compute Engine

**36. Which of the following is not helpful for mitigating the impact of an unexpected failure or reboot?**

A. Use persistent disks

B. Configure tags and labels

C. Use startup scripts to re-configure the system as needed

D. Back up your data

**37. Which tool allows you to sync data in your Google domain with Active Directory?**

A. Google Cloud Directory Sync (GCDS)

B. Google Active Directory (GAD)

C. Google Domain Sync Service

D. Google LDAP Sync

**39. Which of the following is a virtual machine instance that can be terminated by Compute Engine without warning?**

A. A preemptible VM

B. A shared-core VM

C. A high-cpu VM

D. A standard VM

**40. Regarding Compute Engine: What is a managed instance group?**

A. A managed instance group combines existing instances of different configurations into one manageable group

B. A managed instance group uses an instance template to create identical instances

C. A managed instance group creates a firewall around instances

D. A managed instance group is a set of servers used exclusively for batch processing

**41. What type of firewall rule(s) does Google Cloud’s networking support?**

A. deny

B. allow, deny & filtered

C. allow

D. allow & deny

**42. How are subnetworks different than the legacy networks?**

A. They’re the same, only the branding is different

B. Each subnetwork controls the IP address range used for instances that are allocated to that subnetwork

C. With subnetworks IP address allocation occurs at the global network level

D. Legacy networks are the preferred way to create networks

**43. Which of the following is not a valid metric for triggering autoscaling?**

A. Google Cloud Pub/Sub queuing

B. Average CPU utilization

C. Stackdriver Monitoring metrics

D. App Engine Task Queues

**44. Which of the following features makes applying firewall settings easier?**

A. Service accounts

B. Tags

C. Metadata

D. Labels

**45. What option does Cloud SQL offer to help with high availability?**

A. Point-in-time recovery

B. The AlwaysOn setting

C. Snapshots

D. Failover replicas

**46. Regarding Compute Engine: when executing a startup script on a Linux server which user does the instance execute the script as?**

A. ubuntu

B. The Google provided “gceinstance” user

C. Whatever user you specify in the console

D. root

**47. Which of the follow methods will not cause a shutdown script to be executed?**

A. When an instance shuts down through a request to the guest operating system

B. A preemptible instance being terminated

C. An instances.reset API call

D. Shutting down via the cloud console

**48. Which type of account would you use in code when you want to interact with Google Cloud services?**

A. Google group

B. Service account

C. Code account

D. Google account

**49. Which of the following is not an IAM best practice?**

A. Use primitive roles by default

B. Treat each component of your application as a separate trust boundary

C. Grant roles at the smallest scope needed

D. Restrict who has access to create and manage service accounts in your project

**50. Which of the following would not reduce your recovery time in the event of a disaster?**

A. Make it as easy as possible to adjust the DNS record to cut over to your warm standby server.

B. Replace your warm standby server with a hot standby server.

C. Use a highly preconfigured machine image for deploying new instances.

D. Replace your active/active hybrid production environment (on-premises and GCP) with a warm standby server.

**51. Which of the following is not a best practice for mitigating Denial of Service attacks on your Google Cloud infrastructure?**

A. Block SYN floods using Cloud Router

B. Isolate your internal traffic from the external world

C. Scale to absorb the attack

D. Reduce the attack surface for your GCE deployment

**52. Which is the fastest instance storage option that will still be available when an instance is stopped?**

A. Local SSD

B. Standard Persistent Disk

C. SSD Persistent Disk

D. RAM disk

**53. Which of these statements about Microsoft licenses is true?**

A. You can migrate your existing Microsoft application licenses to Compute Engine instances, but not your Microsoft Windows licenses.

B. You can migrate your existing Microsoft Windows and Microsoft application licenses to Compute Engine instances.

C. You cannot migrate your existing Microsoft Windows or Microsoft application licenses to Compute Engine instances.

D. You can migrate your existing Microsoft Windows licenses to Compute Engine instances, but not your Microsoft application licenses.

**54. Which database services support standard SQL queries?**

A. Cloud Bigtable and Cloud SQL

B. Cloud Spanner and Cloud SQL

C. Cloud SQL and Cloud Datastore

D. Cloud SQL

**55. Which statement about IP addresses is false?**

A. You are charged for a static external IP address for every hour it is in use.

B. You are not charged for ephemeral IP addresses.

C. Google Cloud Engine supports only IPv4 addresses, not IPv6.

D. You are charged for a static external IP address when it is assigned but unused.

**56. Which Google Cloud Platform service requires the least management because it takes care of the underlying infrastructure for you?**

A. Container Engine

B. Cloud Engine

C. App Engine

D. Docker containers running on Cloud Engine

**57. To ensure that your application will handle the load even if an entire zone fails, what should you do?**

A. Don’t select the “Multizone” option when creating your managed instance group.

B. Spread your managed instance group over two zones and overprovision by 100%.

C. Create a regional unmanaged instance group and spread your instances across multiple zones.

D. Overprovision your regional managed instance group by at least 50%.

**58. If you do not grant a user named Bob permission to access a Cloud Storage bucket, but then use an ACL to grant access to an object inside that bucket to Bob, what will happen?**

A. Bob will be able to access all of the objects inside the bucket because he was granted access to at least one object in the bucket.

B. Bob will be able to access the object because bucket and object ACLs are independent of each other.

C. Bob will not be able to access the object because he does not have access to the bucket.

D. It is not possible to grant access to an object when it is inside a bucket for which a user does not have access.

**59. To set up a virtual private network between your office network and Google Cloud Platform and have the routes automatically updated when the network topology changes, what is the minimal number of each type of component you need to implement?**

A. 2 Cloud VPN Gateways and 1 Peer Gateway

B. 1 Cloud VPN Gateway, 1 Peer Gateway, and 1 Cloud Router

C. 2 Peer Gateways and 1 Cloud Router

D. 2 Cloud VPN Gateways and 1 Cloud Router

**60. Which of the following statements about encryption on GCP is not true?**

A. Google Cloud Platform encrypts customer data stored at rest by default.

B. Each encryption key is itself encrypted with a set of master keys.

C. If you want to manage your own encryption keys for data on Google Cloud Storage, the only option is Customer-Managed Encryption Keys (CMEK) using Cloud KMS.

D. Data in Google Cloud Platform is broken into subfile chunks for storage, and each chunk is encrypted at the storage level with an individual encryption key.

**61. Which database service requires that you configure a failover replica to make it highly available?**

A. Cloud Spanner

B. Cloud SQL

C. BigQuery

D. Cloud Datastore

**62. Which of these is not a principle you should apply when setting roles and permissions?**

A. Whenever possible, assign roles to groups instead of to individuals.

B. Grant users the appropriate permissions to facilitate least privilege

C. Whenever possible, assign primitive roles rather than predefined roles.

D. Audit all policy changes by checking the Cloud Audit Logs.

**63. Which of these is not a recommended method of authenticating an application with a Google Cloud service?**

A. Use the gcloud and/or gsutil commands.

B. Request an OAuth2 access token and use it directly.

C. Embed the service account’s credentials in the application’s source code.

D. Use one of the Google Cloud Client Libraries.

**64. What are two different features that fully isolate groups of VM instances?**

A. Firewall rules and subnetworks

B. Networks and subnetworks

C. Subnetworks and projects

D. Projects and networks

**65. Suppose you have a web server that is working properly, but you can’t connect to its instance VM over SSH. Which of these troubleshooting methods can you use without disrupting production traffic? (Select 3 answers.)**

A. Create a snapshot of the disk and use it to create a new disk; then attach the new disk to a new instance

B. Use netcat to try to connect to port 22

C. Access the serial console output

D. Create a startup script to collect information.

**66. To configure Stackdriver to monitor a web server and let you know if it goes down, what steps do you need to take? (Select 2 answers.)**

A. Install the Stackdriver Logging Agent on the web server

B. Create an alerting policy

C. Install the Stackdriver Monitoring Agent on the web server

D. Create an uptime check

**67. Which of these tools can you use to copy data from AWS S3 to Cloud Storage? (Select 2 answers.)**

A. Cloud Storage Transfer Service

B. S3 Storage Transfer Service

C. Cloud Storage Console

D. gsutil

**68. What are two of the actions you can take to troubleshoot a virtual machine instance that won’t start up at all? (Select 2 answers.)**

A. Increase the CPU and memory on the instance by changing the machine type.

B. Validate that your disk has a valid file system.

C. Examine your virtual machine instance’s serial port output.

D. Connect to your virtual machine instance using SSH.

**69. Which statements about application load testing are true? (Select 2 answers.)**

A. You should test at the maximum load that you expect to encounter.

B. You should test at 50% more than the maximum load that you expect to encounter.

C. It is not necessary to test sudden increases in traffic since GCP scales seamlessly.

D. Your load tests should include testing sudden increases in traffic.

**70. Which of these statements about resilience testing are true? (Select 2 answers.)**

A. In a resilience test, your application should keep running with little or no downtime.

B. To test the resilience of an autoscaling instance group, you can terminate a random instance within that group.

C. In order for an application to survive instance failures, it should not be stateless.

D. Resilience testing is the same as disaster recovery testing

**71. Which combination of Stackdriver services will alert you about errors generated by your applications and help you locate the root cause in the code?**

A. Monitoring, Trace, and Debugger

B. Monitoring and Error Reporting

C. Debugger and Error Reporting

D. Alerts and Debugger

**72. If you have configured Stackdriver Logging to export logs to BigQuery, but logs entries are not getting exported to BigQuery, what is the most likely cause?**

A. The Cloud Data Transfer Service has not been enabled.

B. There isn’t a firewall rule allowing traffic between Stackdriver and BigQuery.

C. Stackdriver Logging does not have permission to write to the BigQuery dataset.

D. The size of the Stackdriver log entries being exported exceeds the maximum capacity of the BigQuery dataset.

**73. You can use Stackdriver to monitor virtual machines on which cloud platforms?**

A. Google Cloud Platform, Microsoft Azure

B. Google Cloud Platform

C. Google Cloud Platform, Microsoft Azure, Amazon Web Services

D. Google Cloud Platform, Amazon Web Services

**74. To minimize the risk of someone changing your log files to hide their activities, which of the following principles would help? (Select 3 answers.)**

A. Restrict usage of the owner role for projects and log buckets.

B. Require two people to inspect the logs.

C. Implement object versioning on the log-buckets.

D. Encrypt the logs using Cloud KMS.

**75. If network traffic between one Google Compute Engine instance and another instance is being dropped, what is the most likely cause?**

A. The instances are on a network with low bandwidth.

B. The TCP keep-alive setting is too short.

C. The instances are on a default network with no additional firewall rules.

D. A firewall rule was deleted.

**76. Which of the following practices can help you develop more secure software? (Select 3 answers.)**

A. Penetration tests

B. Integrating static code analysis tools into your CI/CD pipeline

C. Encrypting your source code

D. Peer review of code

**77. Which two places hold information you can use to monitor the effects of a Cloud Storage lifecycle policy on specific objects? (Select 2 answers.)**

A. Cloud Storage Lifecycle Monitoring

B. Expiration time metadata

C. Access logs

D. Lifecycle config file

**78. If you have object versioning enabled on a multi-regional bucket, what will the following lifecycle config file do?**

A. Archive objects older than 30 days (the second rule doesn’t do anything)

B. Delete objects older than 30 days (the second rule doesn’t do anything)

C. Archive objects older than 30 days and move objects to Coldline Storage after 365 days

D. Delete objects older than 30 days and move objects to Coldline Storage after 365 days

**79. Which of the following statements about Stackdriver Trace are true? (Select 2 answers.)**

A. Stackdriver Trace tracks the performance of the virtual machines running the application.

B. Stackdriver Trace tracks the latency of incoming requests.

C. Applications in App Engine automatically submit traces to Stackdriver Trace. Applications outside of App Engine need to use the Trace SDK or Trace API.

D. To make an application work with Stackdriver Trace, you need to add instrumentation code using the Trace SDK or Trace API, even if the application is in App

**80. You have been asked to select the storage system for the click-data of your company’s large portfolio of websites. This data is streamed in from a custom website analytics package at a typical rate of 6,000 clicks per minute. With bursts of up to 8,500 clicks per second. It must have been stored for future analysis by your data science and user experience teams.**

**Which storage infrastructure should you choose?**

A. Google Cloud SQL

B. Google Cloud Bigtable

C. Google Cloud Storage

D. Google Cloud Datastore

**81. You want to optimize the performance of an accurate, real-time, weather-charting application. The data comes from 50,000 sensors sending 10 readings a second, in the format of a timestamp and sensor reading.**

**Where should you store the data?**

A. Google Big Query

B. Google Cloud SQL

C. Google Cloud Bigtable

D. Google Cloud Storage

# ANSWER:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 C | 21 A | 41 D | 61 B | 81 C |
| 2 B | 22 D | 42 B | 62 C |  |
| 3 A | 23 D | 43 D | 63 C |  |
| 4 B | 24 B | 44 B | 64 A |  |
| 5 C | 25 B | 45 D | 65 abc |  |
| 6 C | 26 A | 46 D | 66 B D |  |
| 7 B | 27 C | 47 C | 67 A D |  |
| 8 C | 28 A | 48 B | 68 B C |  |
| 9 A E | 29 D | 49 A | 69 A D |  |
| 10 A | 30 B | 50 D | 70 A B |  |
| 11 A | 31 C | 51 A | 71 C |  |
| 12 B C | 32 B | 52 C | 72 C |  |
| 13 A | 33 A | 53 B | 73 D |  |
| 14 D | 34 B | 54 B | 74 acd |  |
| 15 D | 35 D | 55 C | 75 C |  |
| 16 B | 36 D | 56 C | 76 abd |  |
| 17 B | 37 A | 57 B | 77 A D |  |
| 18 D | 38 | 58 B | 78 C |  |
| 19 C | 39 A | 59 B | 79 D |  |
| 20 A | 40 B | 60 C | 80 B |  |

# QUESTIONS:

**1. You want to deploy a cost-sensitive application to Google Cloud Compute Engine. You want the application to be up at all times, but because of the cost-sensitive nature of the application, you only want to run the application in a single VM instance. How should you configure the managed instance group?**

A. Enable autoscaling on the Managed Instance Group (MIG) and set minimum instances to 1 and maximum instances to 2.

B. Disable autoscaling on the Managed Instance Group (MIG) and set mininum instances to 1 and maximum instances to 1.

C. Disable autoscaling on the Managed Instance Group (MIG) and set mininum instances to 1 and maximum instances to 2.

D. Enable autoscaling on the Managed Instance Group (MIG) and set minimum instances to 1 and maximum instances to 1.

**2. You are migrating a mission-critical HTTPS Web application from your on-premises data centre to Google Cloud, and you need to ensure unhealthy compute instances within the autoscaled Managed Instances Group (MIG) are recreated automatically. What should you do?**

A. Deploy Managed Instance Group (MIG) instances in multiple zones.

B. When creating the instance template, add a startup script that sends server status to Cloud Monitoring as a custom metric.

C. Add a metadata tag to the Instance Template with key: healthcheck value: enabled.

D. Configure a health check on port 443 when creating the Managed Instance Group (MIG).

**3. Your organization specializes in helping other companies detect if any pages on their website do not align to the specified standards. To do this, your company has deployed a custom C++ application in your on-premises data centre that crawls all the web pages of a customer’s website, compares the headers and template to the expected standard and stores the result before moving on to another customer’s website. This testing takes a lot of time and has resulted in it missing out on the SLA several times recently. The application team is aware of the slow processing time and wants to run the application on multiple virtual machines to split the load, but there is no free space in the data centre. You have been asked to identify if it is possible to migrate this application to Google cloud, ensuring it can autoscale with minimal changes and reduce the processing time. What GCP service should you recommend?**

A. Deploy the application on Google App Engine Standard service.

B. Deploy the application as Cloud Dataproc job based on Hadoop.

C. Deploy the application on a GCE Managed Instance Group (MIG) with autoscaling enabled.

D. Deploy the application on a GCE Unmanaged Instance Group. Front the group with a network load balancer.

**4. You want to migrate a public NodeJS application, which serves requests over HTTPS, from your on-premises data centre to Google Cloud Platform. You plan to host it on a fleet of instances behind Managed Instances Group (MIG) in Google Compute Engine. You need to configure a GCP load balancer to terminate SSL session before passing traffic to the VMs. Which GCP Load balancer should you use?**

A. Use External SSL proxy load balancer.

B. Use HTTP(S) load balancer.

C. Use Internal TCP load balancer.

D. Use External TCP proxy load balancer.

**5. You host a production application in Google Compute Engine in the us-central1-a zone. Your application needs to be available 24\*7 all through the year. The application suffered an outage recently due to a Compute Engine outage in the zone hosting your application. Your application is also susceptible to slowness during peak usage. You have been asked for a recommendation on how to modify the infrastructure to implement a cost-effective and scalable solution that can withstand zone failures. What would you recommend?**

A. Use Unmanaged instance groups across multiple zones. Enable Autoscaling on the Unmanaged instance group.

B. Use Managed instance groups with instances in a single zone. Enable a Autoscaling on the Managed instance group.

C. Use Managed instance groups across multiple zones. Enable Autoscaling on the Managed instance group.

D. Use Managed instance groups with preemptible instances across multiple zones. Enable Autoscaling on the Managed instance group.

**6. A mission-critical application running on a Managed Instance Group (MIG) in Google Cloud has been having scaling issues. Although the scaling works, it is not quick enough, and users experience slow response times. The solution architect has recommended moving to GKE to achieve faster scaling and optimize machine resource utilization. Your colleague containerized the application and provided you with a Dockerfile. You now need to deploy this in a GKE cluster. How should you do it?**

A. Deploy the application using gcloud app deploy .

B. Deploy the application using kubectl app deploy .

C. Build a container image from the Dockerfile and push it to Google Cloud Storage (GCS). Create a Kubernetes Deployment YAML file and have it use the image from GCS. Use kubectl apply -f deployment.YAML> to deploy the application to the GKE cluster.

D. Build a container image from the Dockerfile and push it to Google Container Registry (GCR). Create a Kubernetes Deployment YAML file and have it use the image from GCR. Use kubectl apply -f to deploy the application to the GKE cluster.

**7. Your company retains all its audit logs in BigQuery for 10 years. At the annual audit every year, you need to provide the auditors’ access to the audit logs. You want to follow Google recommended practices. What should you do?**

A. Grant the auditors’ group custom IAM roles with specific permissions.

B. Grant the auditors’ user accounts roles/logging.viewer and roles/bigquery.dataViewer IAM roles.

C. Grant the auditors’ group roles/logging.viewer and roles/bigquery.dataViewer IAM roles.

D. Grant the auditors’ user accounts custom IAM roles with specific permissions.

**8. You are working for a cryptocurrency startup, and you have enabled a link to the company’s Initial Coin Offering (ICO) whitepaper on the company website – which runs off Google Cloud Storage. Your CTO clicked on this link and got prompted to save the file to their desktop. The CTO thinks this is a poor user experience and has asked you to identify if it is possible to render the file directly in the browser for all users. What should you do?**

A. Add a metadata tag on all the PDF file objects with key: Content- Type and value: application/pdf.

B. Modify the bucket ACLs to make all PDF files public.

C. Add a label on the Cloud Storage bucket with key: Content-Type and value: application/pdf.

D. Use Cloud CDN to front the static bucket and set the HTTP header displayInBrowser to 1

**10. You want to reduce storage costs for infrequently accessed data. The data will still be accessed approximately once a month and data older than 2 years is no longer needed. What should you do to reduce storage costs? (Select 2)**

A. Set an Object Lifecycle Management policy to change the storage class to Archive for data older than 2 years.

B. Set an Object Lifecycle Management policy to change the storage class to Coldline for data older than 2 years.

C. Store infrequently accessed data in a Nearline bucket.

D. Set an Object Lifecycle Management policy to delete data older than 2 years.

E. Store infrequently accessed data in a Multi-Regional bucket.

**12. You want to migrate a mission-critical application from the on-premises data centre to Google Cloud Platform. Due to the mission-critical nature of the application, you want to have 3 idle (unoccupied) instances all the time to ensure the application always has enough resources to handle sudden bursts in traffic. How should you configure the scaling to meet this requirement?**

A. Start with 3 instances and manually scale as needed.

B. Enable Basic Scaling and set maximum instances to 3.

C. Enable Basic Scaling and set minimum instances to 3.

D. Enable Automatic Scaling and set minimum idle instances to 3

**13. Your company owns a mobile game that is popular with users all over the world. The mobile game backend uses Cloud Spanner to store user state. An overnight job exports user state to a Cloud Storage bucket. The app pushes all time-series events during the game to a streaming Dataflow service that saves them to Cloud Bigtable. You are debugging an in-game issue raised by a gamer, and you want to join the user state information with data stored in Bigtable to debug. How can you do this one-off join efficiently?**

A. Create two external tables in BigQuery and link them to the Cloud BigTable and Cloud Storage data sources, respectively. Execute a query in BigQuery console to join up data between the two external tables for the specific gamer.

B. Set up a Cloud Dataflow job to read data from Cloud Spanner and Cloud BigTable for the specific gamer.

C. Set up a Cloud Dataflow job to read data from Cloud Storage and Cloud BigTable for the specific gamer.

D. Set up a Cloud Dataproc Cluster to run a Hadoop job to join up data from Cloud BigTable and Cloud Storage for the specific gamer.

**14. Your finance department wants you to create a new billing account and link all development and test Google Cloud Projects to the new billing account. What should you do?**

A. Ask your security administrator to grant you the Billing Account Creator role on the GCP organization and Project Billing Manager role on all the development and test projects. Link all the development and test projects to an existing Billing Account.

B. Ask your security administrator to grant you the Billing Account Creator role on the GCP organization and Project Billing Manager role on all the development and test projects. Create a new Billing Account and link all the development and test projects to the new Billing Account.

C. Ask your security administrator to grant you the Billing Account Administrator role on the existing Billing Account. Create new development and test projects and link them to the existing Billing Account.

D. Ask your security administrator to grant you the Billing Account Administrator a role on the existing Billing Account Link all development and test projects to the existing Billing Account.

**15. You have annual audits every year and you need to provide external auditors access to the last 10 years of audit logs. You want to minimize the cost and operational overhead while following Google recommended practices. What should you do?**

A. Set a custom retention of 10 years in Stackdriver logging and provide external auditors view access to Stackdriver Logs.

B. Export audit logs to Cloud Filestore via a Pub/Sub export sink.

C. Export audit logs to Cloud Storage via an audit log export sink.

D. Export audit logs to BigQuery via an audit log export sink.

E. Grant external auditors Storage Object Viewer role on the logs storage bucket.

F. Configure a lifecycle management policy on the logs bucket to delete objects older than 10 years

**16. You have been asked to create a new Kubernetes Cluster on Google Kubernetes Engine that can autoscale the number of worker nodes as well as pods. What should you do? (Select 2)**

A. Create Compute Engine instances for the workers and the master and install Kubernetes. Rely on Kubernetes to create additional Compute Engine instances when needed.

B. Enable Horizontal Pod Autoscaling for the Kubernetes deployment.

C. Create a GKE cluster and enable autoscaling on the instance group of the cluster.

D. Configure a Compute Engine instance as a worker and add it to an unmanaged instance group. Add a load balancer to the instance group and rely on the load balancer to create additional Compute Engine instances when needed.

E. Create a GKE cluster and enable autoscaling on Kubernetes Engine.

**17. Your company wants to move all documents from a secure internal NAS drive to a Google Cloud Storage (GCS) bucket. The data contains personally identifiable information (PII) and sensitive customer information. Your company tax auditors need access to some of these documents. What security strategy would you recommend on GCS?**

A. Create randomized bucket and object names. Enable public access, but only provide specific file URLs to people who do not have Google accounts and need access.

B. Use signed URLs to generate time-bound access to objects.

C. Grant no Google Cloud Identity and Access Management (Cloud IAM) roles to users, and use granular ACLs on the bucket.

D. Grant IAM read-only access to users, and use default ACLs on the bucket.

**18. Users of your application are complaining of slowness when loading the application. You realize the slowness is because the App Engine deployment serving the application is deployed in us-central whereas all users of this application are closest to europe-west3. You want to change the region of the App Engine application to europe-west3 to minimize latency. What’s the best way to change the App Engine region?**

A. Create a new project and create an App Engine instance in europe-west3

B. Use the gcloud app region set command and supply the name of the new region.

C. From the console, under the App Engine page, click edit, and change the region drop-down.

D. Contact Google Cloud Support and request the change

**19. You are developing a mobile game that uses Cloud Datastore for gaming leaderboards and player profiles. You want to test an aspect of this solution locally on your Ubuntu workstation which already has Cloud SDK installed. What should you do?**

A. Install Datastore emulator to provide local emulation of the production datastore environment in your local workstation by running gcloud components install.

B. Install Datastore emulator to provide local emulation of the production datastore a environment in your local workstation by running apt get install.

C. Add a new index to Cloud Datastore instance in the development project by running gcloud datastore indexes create and modify your application on your workstation to retrieve the data from Cloud Datastore using the index.

D. Initiate an export of Cloud Datastore instance from development GCP project by executing gcloud datastore export. Modify your applications to point to the export.

**20. You deployed a number of services to Google App Engine Standard. The services are designed as microservices with several interdependencies between them. Most services have few version upgrades but some key services have over 20 version upgrades. You identified an issue with the service pt-createOrder and deployed a new version v3 for this service. You are confident this works and want this new version to receive all traffic for the service. You want to minimize effort and ensure the availability of service. What should you do?**

A. Execute gcloud app versions stop v2 –service=”pt-createOrder” and gcloud app versions start v3 –service=”pt-createOrder”

B. Execute gcloud app versions migrate v3

C. Execute gcloud app versions stop v2 and gcloud app versions start v3

D. Execute gcloud app versions migrate v3 -service – “pt-createOrder”

**21. You have a web application deployed as a managed instance group based on an instance template. You modified the startup script used in the instance template and would like the existing instances to pick up changes from the new startup scripts. Your web application is currently serving live web traffic. You want to propagate the startup script changes to all instances in the managed instances group while minimizing effort, minimizing cost and ensuring that the available capacity does not decrease. What would you do?**

A. Create a new managed instance group (MIG) based on a new template. Add the group to the backend service for the load balancer. When all instances in the new managed instance group are healthy, delete the old managed instance group.

B. Delete instances in the managed instance group (MIG) one at a time and rely on auto-healing to provision an additional instance.

C. Perform a rolling-action start-update with max-unavailable set to 1 and max – surge set to 0

D. Perform a rolling-action replace with max-unavailable set to 0 and max-surge set to 1

**23. To facilitate disaster recovery, your company wants to save database backup tar files in Cloud Storage bucket. You want to minimize the cost. Which GCP Cloud Storage class should you use?**

A. Use Coldline Storage Class.

B. Use Multi-Regional Storage Class.

C. Use Regional Storage Class.

D. Use Nearline Storage Class.

**24. You recently deployed a new application in Google App Engine to serve production traffic. After analyzing logs for various user flows, you uncovered several issues in your application code and have developed a fix to address the issues. Parts of your proposed fix could not be validated in the pre-production environment by your testing team as some of the scenarios can only be validated by an end-user with access to specific data in your production environment. In the company’s weekly Change Approval Board meeting, concerns were raised that the fix could possibly take down the application. It was unanimously agreed that while the fix is risky, it is a necessary change to the application. You have been asked to suggest a solution that minimizes the impact of the change going wrong. You also want to minimize costs. What should you do?**

A. Set up a second Google App Engine service, and then update a subset of clients to hit the new service.

B. Deploy the new application version temporarily, capture logs and then roll it back to the previous version.

C. Deploy a new version of the application, and use traffic splitting to send a small percentage of traffic to it.

D. Create a second Google App Engine project with the new application code, and onboard users gradually to the new application

**25. You want to list all the compute instances in zones us-central1-b and europe-west1-d. Which of the commands below should you run to retrieve this information?**

A. gcloud compute instances list–filter=”zone:(us-central1-b europe-west1-d)”

B. gcloud compute instances get–filter=”zone:(us-central1-b)” and gcloud compute instances list -filter= “zone:( europe-west1-d)” and combine the results.

C. gcloud compute instances list –filter=”zone:(us-central1-b)” and gcloud compute instances list -filter=”zone:(europe-west1-d)” and combine the results.

D. gcloud compute instances get –filter=”zone:(us-central1-b europe-west1-d)”

**26. A production application serving live traffic needs an important update deployed gradually. The application is deployed in a Managed Instance Group (MIG) in the US-Central region. The application receives millions of requests each minute, and you want to patch the application while ensuring the number of instances (capacity) in the Managed Instance Group (MIG) does not decrease. What should you do?**

A. Carry out a rolling update by executing gcloud compute instance-groups rolling-action start-update –max-surge 0 -max-unavailable 1.

B. Deploy the update in a new MIG and add it as a backend service to the existing production Load Balancer. Once all instances in the new group have warmed up, remove the old MIG from the Load Balancer backend and delete the group.

C. Carry out a rolling update by executing gcloud compute instance-groups rolling-action start-update -max-surge 1 -max-unavailable 0.

D. Update the existing Managed Instance Group (MIG) to point to a new instance template containing the updated version. Terminate all existing instances in the MIG and wait until they are all replaced by new instances created from the new template.

**27. You want to create a new role and grant it to the SME team. The new role should provide your SME team BigQuery Job User and Cloud Bigtable User roles on all projects in the organization. You want to minimize operational overhead. You want to follow Google recommended practices. How should you create the new role?**

A. Execute command gcloud iam combineroles –global to combine the 2 roles into a new custom role and grant them globally to SME team group.

B. In GCP Console under IAM Roles, select both roles and combine them into a new custom role. Grant the role to the SME team group at project. Use gcloud iam promote-role to promote the role to all other projects and grant the role in each project to the SME team group.

C. In GCP Console under IAM Roles, select both roles and combine them into a new custom role. Grant the role to the SME team group at project. Repeat this step for each project.

D. In GCP Console under IAM Roles, select both roles and combine them into a new custom role. Grant the role to the SME team group at the organization level.

**28. Your company runs all its applications in us-central1 region in a single GCP project and single VPC. The company has recently expanded its operations to Europe, but customers in the EU are complaining about slowness accessing the application. Your manager has requested you to deploy a new instance in the same project in europe-west1 region to reduce latency to the EU customers. The newly deployed VM needs to reach a central Citrix Licensing Server in us-central-1. How should you design the network and firewall rules while adhering to Google Recommended practices?**

A. Deploy the VM in a new subnet in europe-west1 region in a new VPC. Peer the two VPCs and have the VM contact the Citrix Licensing Server on its internal IP Address.

B. Deploy the VM in a new subnet in europe-west1 region in the existing VPC. Peer the two subnets using Cloud VPN. Have the VM contact the Citrix Licensing Server on its internal IP Address.

C. Deploy the VM in a new subnet in europe-west1 region in a new VPC. Set up an HTTP(s) Load Balancer for the Citrix Licensing Server and have the VM contact the Citrix Licensing Server through the Load Balancer’s public address.

D. Deploy the VM in a new subnet in europe-west1 region in the existing VPC. Have the VM contact the Citrix Licensing Server on its internal IP Address.

**30. Your company stores customer PII data in Cloud Storage buckets. A subset of this data is regularly imported into a BigQuery dataset to carry out analytics. You want to make sure the access to this bucket is strictly controlled. Your analytics team needs read access on the bucket so that they can import data in BigQuery. Your operations team needs read/write access to both the bucket and BigQuery dataset to add Customer PII data of new customers on an ongoing basis. Your Data Vigilance officers need Administrator access to the Storage bucket and BigQuery dataset. You want to follow Google recommended practices. What should you do?**

A. At the Project level, add your Data Vigilance officers user accounts to the Owner role, add your operations team user accounts to the Editor role, and add your analytics team user accounts to the Viewer role.

B. Use the appropriate predefined IAM roles for each of the access levels needed for Cloud Storage and BigQuery. Add your users to those roles for each of the services.

C. At the Organization level, add your Data Vigilance officers user accounts to the Owner role, add your operations team user accounts to the Editor role, and add your analytics team user accounts to the Viewer role.

D. Create 3 custom IAM roles with appropriate permissions for the access levels needed for Cloud Storage and BigQuery. Add your users to the appropriate roles.

**31. Your company has deployed a wide range of application across several Google Cloud projects in the organization. You are a security engineer within the Cloud Security team, and an apprentice has recently joined your team. To gain a better understanding of your company’s Google cloud estate, the apprentice has asked you to provide them access which lets them have detailed visibility of all projects In the organization. Your manager has approved the request but has asked you to ensure the access does not let them edit/write access to any resources. Which IAM roles should you assign to the apprentice?**

A. Grant oles/resourcemanager.organizationViewer and roles/viewer.

B. Grant roles/resourcemanager.organizationAdmin and roles/browser.

C. Grant roles/resourcemanager.organizationViewer and roles/owner.

D. Grant roles/owner and roles/networkmanagement.admin.

**32. You created an update for your application on App Engine. You want to deploy the update without impacting your users. You want to be able to roll back as quickly as possible if it fails. What should you do?**

A. Deploy the update as the same version that is currently running. If the update fails, redeploy your older version using the same version identifier.

B. Deploy the update as a new version. Migrate traffic from the current version to the new version. If it fails, migrate the traffic back to your older version.

C. Deploy the update as the same version that is currently running. You are confident the update works so you don’t plan for a rollback strategy.

D. Notify your users of an upcoming maintenance window and ask them not to use your application during this window. Deploy the update in that maintenance window.

**33. You are designing a mobile game which you hope will be used by numerous users around the world. The game backend requires a Relational DataBase Management System (RDBMS) for persisting game state and player profiles. You want to select a database that can scale to a global audience with minimal configuration updates. Which database should you choose?**

A. Cloud SQL.

B. Cloud Spanner.

C. Cloud Datastore.

D. Cloud Firestore.

**34. Your company stores sensitive user information (PII) in three multi-regional buckets in US, Europe and Asia. All three buckets have data access logging enabled on them. The compliance team has received reports of fraudulent activity and has begun investigating a customer care representative. It believes the specific individual may have accessed some objects they are not authorized to and may have added labels to some files in the buckets to enable favourable discounts for their friends. The compliance team has asked you to provide them with a report of activities for this customer service representative on all three buckets. How can you do this efficiently?**

A. Enable a Cloud Trace on the bucket and wait for the user to access objects/set metadata to capture their activities.

B. Retrieve this information from Activity logs in GCP Console.

C. Retrieve this information from the Cloud Storage bucket page in GCP Console.

D. Apply the necessary filters in Cloud Logging Console to retrieve this information.

**35. Your company’s new mobile game has gone live, and you have transitioned the backend application to the operations team. The mobile game uses Cloud Spanner to persist game state, leaderboard and player profile. All operations engineers require access to view and edit table data to support runtime issues. What should you do?**

A. Grant roles/spanner.databaseUser IAM role to all operations engineers group.

B. Grant roles/spanner.viewer IAM role to all operations engineers group.

C. Grant roles/spanner.viewer IAM role to all operations engineers user accounts.

D. Grant roles/spanner.databaseUser IAM role to all operations engineers user accounts.

**36. You have one GCP project with default region and zone set to us-east1 and us-east1-b respectively. You have another GCP project with default region and zone set to us-west1 and us-west1-a respectively. You want to provision a VM in each of these projects efficiently using gcloud CLI. What should you do?**

A. Execute gcloud config configuration create [config name] to create two configurations, one for each project. Execute gcloud configurations list to create and start the VMs.

B. Execute gcloud config configuration create [config name] to create two configurations, one for each project. Execute gcloud config configurations activate [config name] to activate the first configuration, and gcloud compute instances create to create the VM. Repeat the steps for other configuration.

C. Execute gcloud configurations activate [config name] to activate the configuration for each project and execute gcloud configurations list to create and start the VM.

D. Execute gcloud configurations activate [config name] to activate the configurationfor each project and execute gcloud config list to create and start the VM.

**37. You want to create a Google Cloud Storage regional bucket logs-archive in the Los Angeles region (us-west2). You want to use Coldline storage class to minimize costs and you want to retain files for 10 years. Which of the following commands should you run to create this bucket?**

A. gsutil mb t us-west2 -S nearline -retention 10y gs://logs-archive

B. gsutil mb -l los-angeles -S coldline -retention 10m gs://logs-archive

C. gsutil mb – us-west2 -S coldline – -retention 10m gs://logs-archive

D. gsutil mb – us-west2 -S coldline -retention 10y gs://logs-archive

**38. You developed a web application that lets users upload and share images. You deployed this application in Google Compute Engine and you have configured Stackdriver Logging. Your application sometimes times out while uploading large images, and your application generates relevant error log entries that are ingested to Stackdriver Logging. You would now like to create alerts based on these metrics. You intend to add more compute resources manually when the number of failures exceeds a threshold. What should you do in order to alert based on these metrics with minimal effort?**

A. Add the Stackdriver monitoring and logging agent to the instances running the code.

B. In Stackdriver logging, create a new logging metric with the required filters, edit the application code to set the metric value when needed, and create an alert in Stackdriver based on the new metric.

C. In Stackdriver Logging, create a custom monitoring metric from log data and create an alert in Stackdriver based on the new metric.

D. Create a custom monitoring metric in code, edit the application code to set the metric value when needed, create an alert in Stackdriver based on the new metric.

**39. Your company stores sensitive PII data in a cloud storage bucket. The objects are currently encrypted by Google-managed keys. Your compliance department has asked you to ensure all current and future objects in this bucket are encrypted by customer-managed encryption keys. You want to minimize effort. What should you do?**

A. 1. In the bucket advanced settings, select the Customer-managed key and then select a Cloud KMS encryption key. 2. Existing objects encrypted by Google-managed keys can still be decrypted by the new Customer-managed key.

B. 1. In the bucket advanced settings, select the Customer-managed key and then select a Cloud KMS encryption key. 2. Rewrite all existing objects using gsutil rewrite to encrypt them with the new Customer-managed key.

C. 1. In the bucket advanced settings, select the customer-supplied key and then select a Cloud KMS encryption key. 2. Delete all existing objects and upload them again so they use the new customer-supplied key for encryption.

D. 1 Rewrite all existing objects using gsutil rewrite to encrypt them with the new Customer-managed key. 2. In the bucket advanced settings, select the Customer-managed key and then select a Cloud KMS encryption key.

**40. You have two compute instances in the same VPC but in different regions. You can SSH from one instance to another instance using their internal IP address but not their external IP address. What could be the reason for SSH failing on external IP address?**

A. The external IP address is disabled.

B. The compute instances are not using the right cross-region SSH IAM permissions

C. The compute instances have a static IP for their external IP.

D. The combination of compute instance network tags and VPC firewall rules only allow SSH from the subnets IP range.

**41. Your colleague updated a deployment manager template of a production application serving live traffic. You want to deploy the update to the live environment later during the night when user traffic is at its lowest. The git diff on the pull request shows the changes are substantial and you would like to review the intended changes without applying the changes in the live environment. You want to do this as efficiently and quickly as possible. What should you do?**

A. Preview the changes by applying the deployment manager template with the –preview flag.

B. Add logging statements in the deployment manager template YAML file.

C. Clone the GCP project and apply the deployment manager template in the new project. Review the actions in Cloud Logging and monitor for failures before applying the template in the production GCP project.

D. Apply the deployment manager template and review the actions in Cloud Logging.

**42. You have asked your supplier to send you a purchase order and you want to enable them to upload the file to a cloud storage bucket within the next 4 hours. Your supplier does not have a Google account. You want to follow Google recommended practices. What should you do?**

A. Create a service account with just the permissions to upload files to the bucket. Create a JSON key for the service account. Execute the command gsutil signurl -m PUT -d 4h gs:///\*\*.

B. Create a service account with just the permissions to upload files to the bucket. Create a JSON key for the service account. Execute the command gsutil signurl – -d 4h gs:///.

C. Create a service account with just the permissions to upload files to the bucket. Create a JSON key for the service account. Execute the command gsutil signurl httpMethod PUT-d4h gs:///\*\*.

D. Create a JSON key for the Default Compute Engine Service Account. Execute the command gsutil signurl -m PUT -d 4h gs://kbucket>/\*\*.

**44. Your organization is planning the infrastructure for a new large-scale application that will need to store anything between 200 TB to a petabyte of data in NoSQL format for Low-latency read/write and High-throughput analytics. Which storage option should you use?**

A. Cloud Spanner.

B. Cloud Bigtable.

C. Cloud Datastore.

D. Cloud SQL

**45. You have a collection of audio/video files over 80GB each that you need to migrate to Google Cloud Storage. The files are in your on-premises data center. What migration method can you use to help speed up the transfer process?**

A. Start a recursive upload.

B. Use parallel uploads to break the file into smaller chunks then transfer it simultaneously.

C. Use the Cloud Transfer Service to transfer.

D. Use multithreaded uploads using the -m option

**46. Your company has chosen to go serverless to enable developers to focus on writing code without worrying about infrastructure. You have been asked to identify a GCP Serverless service that does not limit your developers to specific runtimes. In addition, some of the applications need WebSockets support. What should you suggest?**

A. Cloud Run for Anthos

B. Cloud Functions

C. App Engine Standard

D. Cloud Run

**47. Your company wants to move 200 TB of your website clickstream logs from your on-premise data center to Google Cloud Platform. These logs need to be retained in GCP for compliance requirements. Your business analysts also want to run analytics on these logs to understand user click behavior on your website. Which of the below would enable you to meet these requirements? (Select Two)**

A. Load logs into Google Cloud SQL

B. Load logs into Google BigQuery.

C. Upload log files into Google Cloud Storage.

D. Import logs into Google Stackdriver.

E. Insert logs into Google Cloud Bigtable.

**49. You deployed a Python application to GCP App Engine Standard service in the us-central region. Most of your customers are based in Japan and are experiencing slowness due to the latency. You want to transfer the application from us-central region to asia-northeast1 region to minimize latency. What should you do?**

A. Update the region property to asia-northeast1 on the App Engine application.

B. Deploy a new app engine application in the same GCP project and set the region to asia-northeast1. Delete the old App Engine application.

C. Create a new GCP project. Create a new App Engine Application in the new GCP project and set its region to asia-northeast-1. Delete the old App Engine application.

D. Update the default region property to asia-northeast1 on the App Engine Service.

**50. You deployed a Java application in a Google Compute Engine VM that has 3.75 GB Memory and 1 vCPU. At peak usage, the application experiences java.lang. OutOfMemory errors that take down the application entirely and requires a restart. The CPU usage at all times is minimal. Your operations team have asked you to increase the memory on the VM instance to 8 GB. You want to do this while minimizing the cost. What should you do?**

A. Stop the compute engine instance, update the memory on the instance to 8 GB and start the compute engine instance.

B. Make use of the live-migration feature of Google Compute Engine to migrate the application to another instance with more memory.

C. Stop the compute engine instance, update the machine to n1-standard-2 and start the compute engine instance.

D. Add a metadata tag to the instance with key: new-memory-size and value: 8GB.

# ANSWER:

|  |  |  |
| --- | --- | --- |
| 1 B | 21 C | 41 A |
| 2 D | 22 | 42 A |
| 3 C | 23 A | 43 |
| 4 B | 24 C | 44 B |
| 5 C | 25 A | 45 B |
| 6 C | 26 C | 46 A |
| 7 C | 27 D | 47 B C |
| 8 A | 28 C | 48 |
| 9 | 29 | 49 B |
| 10 C D | 30 B | 50 A |
| 11 | 31 A |  |
| 12 C | 32 B |  |
| 13 A | 33 B |  |
| 14 B | 34 D |  |
| 15 cef | 35 D |  |
| 16 B E | 36 B |  |
| 17 B | 37 D |  |
| 18 A | 38 C |  |
| 19 A | 39 B |  |
| 20 C | 40 D |  |

# QUESTIONS:

**1. You have an application deployed in a GKE Cluster as a Kubernetes workload with Daemon Sets. Your application has become very popular and is now struggling to cope up with increased traffic. You want to add more pods to your workload and want to ensure your cluster scales up and scales down automatically based on volume. What should you do?**

A. Enable autoscaling on Kubernetes Engine.

B. Perform a rolling update to modify machine type from 11-standard-2 to n1- – standard-4.

C. Enable Horizontal Pod Autoscaling for the Kubernetes deployment.

D. Create another identical Kubernetes workload and split traffic between the two workloads.

**2. You developed an application to serve production users and you plan to use Cloud SQL to host user state data which is very critical for the application flow. You want to protect your user state data from zone failures. What should you do?**

A. Create a Read replica in the same region but in a different zone.

B. Configure High Availability (HA) for Cloud SQL and Create a Failover replica in the same region but in a different zone.

C. Create a Read replica in a different region.

D. Configure High Availability (HA) for Cloud SQL and Create a Failover replica in a different region.

**3. You want to migrate an XML parser application from the on-premises data centre to Google Cloud Platform. You created a development project, set up the necessary IAM roles and deployed the application in a compute engine instance. The testing has succeeded, and you are ready to deploy the staging instance. You want to create the same IAM roles in a new staging GCP project. How can you do this efficiently without compromising security?**

A. Make use of gcloud iam roles copy command to copy the IAM roles from the Development GCP organization to the Staging GCP organization.

B. Make use of Create Role feature in GCP console to create all necessary IAM roles from new in the Staging project.

C. Make use of gcloud iam roles copy command to copy the IAM roles from the Development GCP project to the Staging GCP project.

D. Make use of the Create Role from Role feature in GCP console to create IAM roles in the Staging project from the Development IAM roles

**4. Your company’s auditors carry out an annual audit every year and have asked you to provide them with all the IAM policy changes in Google Cloud since the last audit. You want to streamline and expedite the analysis for audit. How should you share the information requested by auditors?**

A. Export all audit logs to Cloud Pub/Sub via an export sink. Use a Cloud Function to read the messages and store them in Cloud SQL. Make use of ACLs and views to restrict the data shared with the auditors.

B. Export all audit logs to Google Cloud Storage bucket and set up the necessary IAM acces to restrict the data shared with auditors.

C. Export all audit logs to BigQuery dataset. Make use of ACLs and views to restrict the data shared with the auditors.

D. Have the auditors query the required information quickly. Configure alerts in Cloud Monitoring and trigger notifications to the auditors.

**5. You work at a large organization where each team has a distinct role. The development team can create Google Cloud projects but can’t link them to a billing account – this role is reserved for the finance team, and the development team do not want finance team to make changes to their project resources. How should you configure IAM access controls to enable this?**

A. Grant the development team Billing Account User (roles/billing.user) role on the billing account and Project Billing Manager (roles/billing.projectManager) on the GCP organization.

B. Grant the finance team Billing Account User (roles/billing.user) role on the billing account and Project Billing Manager roles/billing.projectManager) on the GCP organization.

C. Grant the finance team Billing Account User (roles/billing.user) role on the billing account.

D. Grant the development team Billing Account User (roles/billing.user) role on the billing account.

**6. 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.

**7. You deployed a Java application on four Google Cloud Compute Engine VMs in two zones behind a network load balancer. During peak usage, the application has stuck threads. This issue ultimately takes down the whole system and requires a reboot of all VMs. Your operations team have recently heard about self-healing mechanisms in Google Cloud and have asked you to identify if it is possible to automatically recreate the VMs if they remain unresponsive for 3 attempts 10 seconds apart. What should you do?**

A. Enable autoscaling on the Managed Instance Group (MIG).

B. Enable autohealing and set the autohealing health check to healthy (HTTP).

C. Use a global HTTP(s) Load Balancer instead and limit Requests Per Second (RPS) to 10.

D. Use a global HTTP(s) Load Balancer instead and set the load balancer health check to healthy (HTTP).

**8. You’ve created a Kubernetes engine cluster named “my-gcp-ace-proj-1”, which has a cluster pool named my-gcp-ace-primary-node-pool. You want to increase the number of nodes within your cluster pool from 10 to 20 to meet capacity demands. What is the command to change the number of nodes in your pool?**

A. gcloud container clusters update my-gcp-ace-proj-1 – -node-pool my-gcp-ace- primary-node-pool -num-nodes 20

B. gcloud container clusters resize my-gcp-ace-proj- 1 – -node-pool my-gcp-ace- primary-node-pool -new-size 20

C. gcloud container clusters resize my-gcp-ace-proj- 1 – -node-pool my-gcp-ace-primary-node-pool -num-nodes 20

D. kubectl container clusters update my-gcp-ace-proj-1 – -node-pool my-gcp-ace- primary-node-pool–num-nodes 20

**9. A company wants to build an application that stores images in a Cloud Storage bucket and wants to generate thumbnails as well as resize the images. They want to use a google managed service that can scale up and scale down to zero automatically with minimal effort. You have been asked to recommend a service. Which GCP service would you suggest?**

A. Google Compute Engine

B. Google App Engine

C. Cloud Functions

D. Google Kubernetes Engine

**10. Your company is migrating a mission-critical application from the on-premises data centre to Google Cloud Platform. The application requires 12 Compute Engine VMs to handle traffic at peak usage times. Your operations team have asked you to ensure the VMs restart automatically (i.e. without manual intervention) if/when they crash, and the processing capacity of the application does not reduce down during system maintenance. What should you do?**

A. Deploy the application on a Managed Instance Group (MIG) that disables the creation retry mode by setting the -nocreation-retries flag.

B. Create an instance template with availability policy that turns off the automatic restart behaviour and sets on-host maintenance to terminate instances during maintenance events. Deploy the application on a Managed Instance Group (MIG) based on this template.

C. Deploy the application on a Managed Instance Group (MIG) with autohealing health check set to healthy (HTTP).

D. Create an instance template with availability policy that turns on the automatic restart behaviour and sets on-host maintenance to live migrate instances during maintenance events. Deploy the application on a Managed Instance Group (MIG) based on this template.

**11. You want to ensure the boot disk of a preemptible instance is persisted for re-use. How should you provision the gcloud compute instance to ensure your requirement is met.**

A. gcloud compute instances create [INSTANCE\_NAME] -preemptible. The flag — boot-disk-auto-delete is disabled by default.

B. gcloud compute instances create [INSTANCE\_NAME] -preemptible — -boot-disk- auto-delete=no

C. gcloud compute instances create [INSTANCE\_NAME] –preemptible — no-boot-disk-auto-delete

D. gcloud compute instances create [INSTANCE\_NAME] -no-auto-delete

**12.You want to ingest and analyze large volumes of stream data from sensors in real- time, matching the high speeds of loT data to track normal and abnormal behavior. You want to run it through a data processing pipeline and store the results. Finally, you want to enable customers to build dashboards and drive analytics on their data in real-time. What services should you use for this task?**

A. Cloud Pub/Sub, Cloud Dataflow, Cloud Dataprep

B. Stackdriver, Cloud Dataflow, BigQuery

C. Cloud Pub/Sub, Cloud Dataflow, Cloud Dataproc

D. Cloud Pub/Sub, Cloud Dataflow, BigQuery

**13. Your company is migrating an application from its on-premises data centre to Google Cloud. One of the applications uses a custom Linux distribution that is not available on Google Cloud. Your solution architect has suggested using VMWare tools to exporting the image and store it in a Cloud Storage bucket. The VM Image is a single compressed 64 GB tar file. You started copying this file using gsutil over a dedicated 1Gbps network, but the transfer is taking a very long time to complete. Your solution architect has suggested using all of the 1Gbps Network to transfer the file quickly. What should you do?**

A. Use parallel composite uploads to speed up the transfer.

B. Upload the file Multi-Regional instead and move the file to Nearline Storage Class.

C. Restart the transfer from GCP console.

D. Increase the transfer speed by decreasing the TCP window size.

**14, Your company collects and stores CCTV footage videos in raw format in Google Cloud Storage. Within the first 30 days, the footage is processed regularly for detecting patterns such as threat/object/face detection and suspicious behavior detection. You want to minimize the cost of storing all the data in Google Cloud. How should you store the videos?**

A. Use Google Cloud Regional Storage for the first 30 days, and use lifecycle rules to transition to Nearline Storage.

B. Use Google Cloud Nearline Storage for the first 30 days, and use lifecycle rules to transition to Coldline Storage.

C. Use Google Cloud Regional Storage for the first 30 days, and then move videos to Google Persistent Disk.

D. Use Google Cloud Regional Storage for the first 30 days, and use lifecycle rules to transition to Coldline Storage.

15. You migrated an internal HR system from an on-premises database to Google Cloud Compute Engine Managed Instance Group (MIG). The networks team at your company has asked you to associate the internal DNS records of the VMs with a custom DNS zone. You want to follow Google recommended practices. What should you do?

A. 1.Create a new Cloud DNS zone and a new VPC and associate the DNS zone with the VPC. 2. When provisioning the VMs, associate the DNS records with the new DNS zone. 3. Configure firewall rules to block all external (public) traffic. 4. Finally, configure the DNS zone associated with the default VPC to direct all requests to the new DNS zone.

B. 1.Provision the VMs with custom hostnames.

C. 1.Create a new Cloud DNS zone and set its visibility to private. 2. When provisioning the VMs, associate the DNS records with the new DNS zone.

D. 1.Install a new BIND DNS server on Google Compute Engine, using the BIND name server software (BIND9). 2. Configure a Cloud DNS forwarding zone to direct all requests to the Internal BIND DNS server. 3. When provisioning the VMs, associate the DNS records with the Internal BIND DNS server.

**16. Your team is working towards using the desired state configuration for your application deployed on the GKE cluster. You have YAML files for the Kubernetes Deployment and Service objects. Your application is designed to have 2 pods, which is defined by the replicas parameter in app-deployment.yaml. Your service uses GKE Load Balancer which is defined in app-service.yaml You created the Kubernetes resources by running 1 kubectl apply -f app-deployment.yaml 2 kubectl apply -f app-service.yaml Your deployment is now serving live traffic but is suffering from performance issues. You want to increase the number of replicas to 5. What should you do in order to update the replicas in existing Kubernetes deployment objects?**

A. Disregard the YAML file. Enable autoscaling on the deployment to trigger on CPU usage and set max pods to 5. kubectl autoscale myapp—max=5–cpu- percent=80

B. Modify the current configuration of the deployment by using kubectl edit to open the YAML file of the current configuration, modify and save the configuration. kubectl edit deployment/app-deployment-o yaml –save-config

C. Disregard the YAML file. Use the kubectl scale command to scale the replicas to 5. kubectl scale -replicas= -f app-deployment.yaml

D. Edit the number of replicas in the YAML file and rerun the kubectl apply. kubectl apply -f app-deployment.yaml

**17. An application that you are migrating to Google Cloud relies on overnight batch jobs that take between 2 to 3 hours to complete. You want to do this at a minimal cost. Where should you run these batch jobs?**

A. Run the batch jobs in a non-preemptible shared core compute engine instance that supports short periods of bursting.

B. Run the batch jobs in a GKE cluster on a node pool with four instances of type f1-micro.

C. Run the batch jobs in a GKE cluster on a node pool with a single instance of type e2-small.

D. Run the batch jobs in a preemptible compute engine instance of appropriate machine type.

**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-nqqat” 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

**19. You are enhancing a production application currently running on an Ubuntu Linux VM on Google Compute Engine. The new enhancements require a connection to Cloud SQL to persist user addresses. Your colleague has created the Cloud SQL instance and an IAM service account with the correct permissions but doesn’t know how to configure the VM to use this service account, and has asked for your assistance. What should you do?**

A. Execute gcloud iam service-accounts keys create to generate a ISON key for the service account. Add a metadata tag on the GCP project with key: service-account and value: .

B. Set the service account in the Identity and API access section when provisioning the compute engine VM.

C. Execute gcloud iam service-accounts keys create to generate a JSON key for the service account. Add a metadata tag to the compute instance with key: service- account and value:

D. Execute gcloud iam service-accounts keys create to generate a JSON key for the service account. Copy the contents of JSON key to ~/identity/default-service- account.json overwrite the default service account.

**20. You created a cluster.YAML file containing : resources: – name: cluster type: container.vl.cluster properties: zone: europe-west1-b cluster: 2 description: “My GCP ACE cluster” # initialNodeCount: 2 You want to use Cloud Deployment Manager to create this cluster in GKE. What should you do?**

A. gcloud deployment-manager deployments create my-gcp-ace-cluster –config cluster.yaml

B. gcloud deployment-manager deployments apply my-gcp-ace-cluster\_-type container.v1.duster–config cluster.yaml

C. gcloud deployment-manager deployments apply my-gcp-oce-cluster–config cluster.yaml

D. gcloud deployment-manager deployments create my-gcp-ace-cluster–type container.v1.cluster–config cluster.yaml

**21. Your company, which runs highly rated mobile games, has chosen to migrate its analytics backend to BigQuery. The analytics team of 7 analysts need access to perform queries against the data in BigQuery. The analytics team members change frequently. How should you grant them access?**

A. Create a Cloud Identity account for each analyst and grant roles/bigquery.dataViewel role to each account.

B. Create a Cloud Identity account for each analyst and add them all to a group. Grant roles/bigquery.jobUser role to the group.

C. Create a Cloud Identity account for each analyst and add them all to a group. Grant roles/bigquery.dataViewer role to the group.

D. Create a Cloud Identity account for each analyst and grant roles/bigquery.jobUser role to each account.

**22. Your company plans to store sensitive PII data in a cloud storage bucket. Your compliance department doesn’t like encrypting sensitive PII data with Google- managed keys and has asked you to ensure the new objects uploaded to this bucket are encrypted by customer-managed encryption keys. What should you do?(Select Three)**

A. In the bucket advanced settings, select the Customer-supplied key and then select a Cloud KMS encryption key.

B. Use gsutil with –encryption-key=[ENCRYPTION\_KEY] when uploading objects to the bucket.

C. In the bucket advanced settings, select the Customer-managed key and then select a Cloud KMS encryption key.

D. Modify .boto configuration to include encryption\_key = [KEY\_RESOURCE] when uploading objects to bucket.

E. Use gsutil with -O “GSUtil:encryption\_key=[KEY\_RESOURCE]’ when uploading objects to the bucket.

**23.Your company recently acquired a startup that lets its developers pay for their projects using their company credit cards. You want to consolidate the billing of all GCP projects into a new billing account. You want to follow Google recommended practices. How should you do this?**

A. Send an email to billing.support@cloud.google.con and request them to create a new billing account and link all the projects to the billing account.

B. Raise a support request with Google Billing Support and request them to create a new billing account and link all the projects to the billing account.

C. In the GCP Console, move all projects to the root organization in the Resource Manager.

D. Ensure you have the Billing Account Creator Role. Create a new Billing account yourself and set up a payment method with company credit card details.

**24. You are enhancing a production application currently running on an Ubuntu Linux VM on Google Compute Engine. The new enhancements require a connection to SQL Server instance to persist user appointments. Your colleague has provisioned an SQL Server instance in a Google Compute Engine VM in US-Central region and has asked for your assistance to RDP to the VM in the least number of steps. What should you suggest?**

A. Add a firewall rule to allow TCP traffic on port 3389. In the GCP console, add a username and password for the Windows VM instance. Install Chrome RDP for Google Cloud Platform extension and click the RDP button in the console to connect to the instance with the credentials.

B. In the GCP console, add a username and password for the Windows 0 VM instance. Install an RDP client and connect to the instance with username and password.

C. Add a firewall rule to allow TCP traffic on port 3389. Install an RDP client and connect to the instance.

D. Add a firewall rule to allow TCP traffic on port 22. In the GCP console, add a password for the Windows VM instance. Install Chrome RDP for Google Cloud Platform extension and click the RDP button in the console to connect to the instance with the credentials.

**25. You have two compute instances in the same VPC but in different regions. You can SSH from one instance to another instance using their external IP address but not their internal IP address. What could be the reason for SSH failing on the internal IP address?**

A. The compute instances have a static IP for their internal IP.

B. The combination of compute instance network tags and VPC firewall rules allow SSH from 0.0.0.0 but denies SSH from the VPC subnets IP range.

C. The internal IP address is disabled.

D. The compute instances are not using the right cross-region SSH IAM permissions.

**26. Your team is responsible for the migration of all legacy on-premises applications to Google Cloud. Your team is a big admirer of serverless and has chosen App Engine Standard as the preferred choice for compute workloads. Your manager asked you to migrate a legacy accounting application built in C++, but you realized App Engine Standard doesn’t support C++. What GCP compute services should you use instead to maintain the serverless aspect?(Choose two answers)**

A. Deploy the containerized version of the application in Cloud Run.

B. Deploy the containerized version of the application in Cloud Run on GKE.

C. Deploy the containerized version of the application in Google Kubernetes Engine (GKE).

D. Deploy the containerized version of the application in App Engine Flex.

E. Convert the application into a set of functions and deploy them in Google Cloud Functions.

**27. You want to persist logs for 10 years to comply with regulatory requirements. You want to follow Google recommended practices. Which Google Cloud Storage class should you use?**

A. Coldline storage class

B. Archive storage class

C. Nearline storage class

D. Standard storage class

**28.A GKE cluster (test environment) in your test GCP project is experiencing issues with a sidecar container connecting to Cloud SQL. This issue has resulted in a massive amount of log entries in Cloud Logging and shot up your bill by 25%. Your manager has asked you to disable these logs as quickly as possible and using the least number of steps. You want to follow Google recommended practices. What should you do?**

A. In Cloud Logging, disable the log source for GKE Cluster Operations resource in the Logs ingestion window.

B. Recreate the GKE cluster and disable Cloud Logging.

C. Recreate the GKE cluster and disable Cloud Monitoring.

D. In Cloud Logging, disable the log source for GKE container resource in the Logs ingestion window

**29. You are in the process of migrating a mission-critical application from your on- premises data centre to Google Kubernetes Engine (GKE). Your operations team do not want to take on the overhead for upgrading the GKE cluster and have asked you to ensure the Kubernetes version is always stable and supported. What should you do**?

A. When provisioning the GKE cluster, ensure you use the latest stable and supported version.

B. Update your GKE cluster to turn on GKE’s node auto-upgrade feature.

C. When provisioning the GKE cluster, use Container Optimized os node images.

D. Update your GKE cluster to turn on GKE’s node auto-repair feature.

**30. You have two workloads on GKE (Google Kubernetes Engine) – create-order and dispatch-order. create-order handles the creation of customer orders, and dispatch- order handles dispatching orders to your shipping partner. Both create-order and dispatch-order workloads have cluster autoscaling enabled. The create-order deployment needs to access (i.e. invoke web service of) dispatch-order deployment. dispatch-order deployment cannot be exposed publicly. How should you define the services?**

A. Create a Service of type ClusterlP for dispatch-order. Have create- order use the Service IP address.

B. Create a Service of type LoadBalancer for dispatch-order and an Ingress S Resource for that Service. Have create-order use the Ingress IP address.

C. Create a Service of type LoadBalancer for dispatch-order. Have create-order use the Service IP address.

D. Create a Service of type NodePort for dispatch-order and an Ingress Resource for that Service. Have create-order use the Ingress IP address.

**31. Your company runs a very successful web platform and has accumulated 3 petabytes of customer activity data in sharded MySQL database located in your datacenter. Due to storage limitations in your on-premise data center, your company has decided to move this data to GCP. The data must be available all through the day. Your business analysts, who have experience of using a SQL Interface, have asked for a seamless transition. How should you store the data so that availability is ensured while optimizing the ease of analysis for the business analysts?**

A. Import data into Google BigQuery.

B. Import flat files into Google Cloud Storage.

C. Import data into Google Cloud Datastore.

D. Import data into Google Cloud SQL

**32. Your manager asked you to write a script to upload objects to a Cloud Storage bucket. How should you set up the IAM access to enable the script running in a Google Compute VM upload objects to Cloud Storage?**

A. Create a new IAM service account with the access scope cloud-platform and configure the script to use this service account.

B. Grant roles/storage.objectCreator IAM role to the service account used by the VM.

C. Grant roles/storage.objectAdmin IAM role to the service account used by the VM.

D. Create a new IAM service account with the access scope devstorage.write\_only and configure the script to use this service account

**33. You are migrating your on-premises workloads to GCP VPC, and you want to use Compute Engine virtual machines. You want to separate the Finance team VMs and the Procurement team VMs into separate subnets. You need all VMs to communicate with each other over their internal IP addresses without adding routes. What should you do?**

A. Use Deployment Manager to create a new VPC with 2 subnets in 2 different regions. Ensure the subnets use non-overlapping IP range.

B. Use Deployment Manager to create a new VPC with 2 subnets in the same region. Ensure the subnets use the same IP range.

C. Use Deployment Manager to create two VPCs, each with a subnet in a different region. Ensure the subnets use non-overlapping IP range.

D. Use Deployment Manager to create two VPCs, each with a subnet in the same 0 region. Ensure the subnets use overlapping IP range

**34. Your compliance team requested all audit logs are stored for 10 years and to allow access for external auditors to view. You want to follow Google recommended practices. What should you do?(Choose two)**

A. Create an account for auditors to have view access to Stackdriver Logging.

B. Export audit logs to Cloud Storage via an export sink.

C. Export audit logs to Splunk via a Pub/Sub export sink.

D. Generate a signed URL to the Stackdriver export destination for auditors to access.

E. Export audit logs to BigQuery via an export sink.

**35. You deployed a workload to your GKE cluster by running the command kubectl apply -f app.yaml. You also enabled a LoadBalancer service to expose the deployment by running kubectl apply – f service.yaml. Your pods are struggling due to increased load so you decided to enable horizontal pod autoscaler by running kubectl autoscale deployment [YOUR DEPLOYMENT] –cpu-percent=5t -min= 1 max=10. You noticed the autoscaler has launched several new pods but the new pods have failed with the message “Insufficient cpu”. What should you do to resolve this issue?**

A. Use “kubectl container clusters resize” to add more nodes to the node pool.

B. Use “gcloud container clusters resize” to add more nodes to the node pool.

C. Edit the managed instance group of the cluster and enable autoscaling.

D. Edit the managed instance group of the cluster and increase the number of VMs by 1.

**36. Your organization is planning to deploy a Python web application to Google Cloud. The web application uses a custom Linux distribution and you want to minimize rework. The web application underpins an important website that is accessible to the customers globally. You have been asked to design a solution that scales to meet demand. What would you recommend to fulfill this requirement? (Select Two)**

A. Cloud Functions

B. App Engine Standard environment

C. HTTP(S) Load Balancer

D. Managed Instance Group on Compute Engine

E. Network Load Balance

**37. The application development team at your company wants to use the biggest CIDR range possible for a VPC and has asked for your suggestion. Your operations team is averse to using any beta features. What should you suggest?**

A. Use 0.0.0.0/0 CIDR range.

B. Use 10.0.0.0/8 CIDR range.

C. Use 172.16.0.0/12 CIDR range.

D. Use 192.168.0.0/16 CIDR range.

**38. The storage costs for your application logs have far exceeded the project budget. The logs are currently being retained indefinitely in the Cloud Storage bucket myapp-gcp-ace-logs. You have been asked to remove logs older than 90 days from your Cloud Storage bucket. You want to optimize ongoing Cloud Storage spend. What should you do?**

A. Write a script that runs gsutil Is -| – gs://myapp-gcp-ace-logs/\*\* to find and remove items older than 90 days. Schedule the script with cron.

B. Write a lifecycle management rule in JSON and push it to the bucket with gsutil lifecycle set config-json-file.

C. Write a lifecycle management rule in XML and push it to the bucket with gsutil lifecycle set config-xml-file.

D. Write a script that runs gsutil Is -Ir gs://myapp-gcp-ace-logs/\*\* to find and remove items older than 90 days. Repeat this process every morning

**39. Your company wants to migrate a mission-critical application to Google Cloud Platform. The application is currently hosted in your on-premises data centre and runs off several VMs. Your migration manager has suggested a “lift and shift” to Google Compute Engine Virtual Machines and has asked you to ensure the application scales quickly, automatically and efficiently based on the CPU utilization. You want to follow Google recommended practices. What should you do?**

A. Deploy the application to Google Compute Engine Managed Instance Group (MIG) with autoscaling enabled based on CPU utilization.

B. Deploy the application to GKE cluster with Horizontal Pod Autoscaling (HPA) enabled based on CPU utilization.

C. Deploy the application to Google Compute Engine Managed Instance Group (MIG) with time-based autoscaling based on last months traffic patterns.

D. Deploy the application to Google Compute Engine Managed Instance Group (MIG). Deploy a Cloud Function to look up CPU utilization in Cloud Monitoring every minute and scale up or scale down the MIG group as needed.

**40. Your company is migrating all applications from the on-premises data centre to Google Cloud, and one of the applications is dependent on Websockets protocol and session affinity. You want to ensure this application can be migrated to Google Cloud platform and continue serving requests without issues. What should you do?**

A. Modify application code to not depend on session affinity.

B. Review the design with the security team.

C. Modify application code to use HTTP streaming.

D. Discuss load balancer options with the relevant teams.

**41. Your organization processes a very high volume of timestamped loT data. The total volume can be several petabytes. The data needs to be written and changed at a high speed. You want to use the most performant storage option for your data. Which product should you use?**

A. Cloud Bigtable

B. Cloud Datastore

C. BigQuery

D. Cloud Storage

**42. The deployment team currently spends a lot of time creating and configuring VMs in Google Cloud Console, and feel they could be more productive and consistent if the same can be automated using Infrastructure as Code. You want to help them identify a suitable service. What should you recommend?**

A. Managed Instance Group (MIG).

B. Unmanaged Instance Group.

C. Deployment Manager.

D. Cloud Build.

**43. Your company owns a mobile game that is popular with users all over the world. The mobile game backend uses Cloud Spanner to store user state. An overnight job exports user state to a Cloud Storage bucket. Your operations team needs access to monitor the spanner instance but not have the permissions to view or edit user data. What IAM role should you grant the operations team?**

A. Grant the operations team roles/stackdriver.accounts. viewer IAM role.

B. Grant the operations team roles/spanner.database.reader IAM role.

C. Grant the operations team roles/monitoring.viewer IAM role.

D. Grant the operations team roles/spanner.database.user IAM role.

**44. A mission-critical application running in Google Cloud Platform requires an urgent update to fix a security issue without any downtime. How should you do this in CLI using deployment manager?**

A. Use gcloud deployment-manager resources create and point to the deployment config file.

B. Use gcloud deployment-manager resources update and point to the deployment config file.

C. Use gcloud deployment-manager deployments update and point to the deployment config file.

D. Use gcloud deployment-manager deployments create and point to the deployment config file.

**45. An intern joined your team recently and needs access to Google Compute Engine in your sandbox project to explore various settings and spin up compute instances to test features. You have been asked to facilitate this. How should you give your intern access to compute engine without giving more permissions than is necessary?**

A. Create a shared VPC to enable the intern access Compute resources.

B. Grant Project Editor IAM role for sandbox project.

C. Grant Compute Engine Instance Admin Role for the sandbox project.

D. Grant Compute Engine Admin Role for sandbox project.

**46. A recent reorganization in your company has seen the creation of a new data custodian team – responsible for managing data in all storage locations. Your production GCP project uses buckets in Cloud Storage, and you need to delegate control to the new team to manage objects and buckets in your GCP project. What role should you grant them?**

A. Grant the data custodian team Project Editor IAM role.

B. Grant the data custodian team Storage Object Creator IAM role.

C. Grant the data custodian team Storage Admin IAM role.

D. Grant the data custodian team Storage Object Admin IAM role.

**47. You want to list all the internal and external IP addresses of all compute instances. Which of the commands below should you run to retrieve this information?**

A. gcloud compute instances list.

B. gcloud compute networks list.

C. gcloud compute networks list-ip.

D. gcloud compute instances list-ip.

**48. 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.

**49. You have a web application deployed as a managed instance group. You noticed some of the compute instances are running low on memory. You suspect this is due to JVM memory leak and you want to restart the compute instances to reclaim the leaked memory. Your web application is currently serving live web traffic. You want to ensure that the available capacity does not go below 80% at any time during the restarts and you want to do this at the earliest. What would you do?**

A. Perform a rolling-action reboot with max-surge set to 20%.

B. Perform a rolling-action restart with max-unavailable set to 20%.

C. Stop instances in the managed instance group (MIG) one at a time and rely on autohealing to bring them back up.

D. Perform a rolling-action replace with max-unavailable set to 20%.

**50. You are migrating a Python application from your on-premises data centre to Google Cloud. You want to deploy the application Google App Engine, and you modified the python application to use Cloud Pub/Sub instead of RabbitMQ. The application uses a specific service account which has the necessary permissions to publish and subscribe on Cloud Pub/Sub; however, the operations team have not enabled the Cloud Pub/Sub API yet. What should you do?**

A. Grant roles/pubsub.admin IAM role to the service account and modify the application code to enable the API before publishing or subscribing.

B. Configure the App Engine Application in GCP Console to use the specific Service Account with the necessary IAM permissions and rely on the automatic enablement of the Cloud Pub/Sub API on the first request to publish or subscribe.

C. Navigate to the APIs & Services section in GCP console and enable Cloud Pub/Sub API.

D. Use deployment manager to configure the App Engine Application to use the specific Service Account with the necessary IAM permissions and rely on the automatic enablement of the Cloud Pub/Sub API on the first request to publish or subscribe.

**51. You created a Kubernetes deployment by running kubectl run nginx -image=nginx labels= “app=prod”. Your Kubernetes cluster is also used by a number of other deployments. How can you find the identifier of the pods for this nginx deployment?**

A. kubectl get deployments –output=pods

B. gcloud get pods –selector=”app=prod”

C. kubectl get pods -I “app=prod”

D. gcloud list gke-deployments -filter={pod }

**52. You developed an application that lets users upload statistical files and subsequently run analytics on this data. You chose to use Google Cloud Storage and BigQuery respectively for these requirements as they are highly available and scalable. You have a docker image for your application code, and you plan to deploy on your on-premises Kubernetes clusters. Your on-prem Kubernetes cluster needs to connect to Google Cloud Storage and BigQuery and you want to do this in a secure way following Google recommended practices. What should you do?**

A. Create a new service account, with editor permissions, generate and download a key. Use the key to authenticate inside the application.

B. Create a new service account, grant it the least viable privileges to the required services, generate and download a JSON key. Use the JSON key to authenticate inside the application.

C. Use the default service account for App Engine, which already has the required permissions.

D. Use the default service account for Compute Engine, which already has the required permissions.

**53. Your company has deployed several production applications across many Google Cloud Projects. Your operations team requires a consolidated monitoring dashboard for all the projects. What should you do?**

A. Set up a shared VPC across all production GCP projects and configure Cloud Monitoring dashboard on one of the projects.

B. Create a Stackdriver account in each project and configure all accounts to use the same service account. Create a monitoring dashboard in one of the projects.

C. Create a single Stackdriver account and link all production GCP projects to it. Configure a monitoring dashboard in the Stackdriver account.

D. Create a Stackdriver account and a Stackdriver group in one of the production GCP projects. Add all other projects as members of the group. Configure a monitoring dashboard in the Stackdriver account.

**54. An engineer from your team accidentally deployed several new versions of NodeJS application on Google App Engine Standard. You are concerned the new versions are serving traffic. You have been asked to produce a list of all the versions of the application that are receiving traffic as well the percent traffic split between them. What should you do?**

A. gcloud app versions list -hide-no-traffic

B. gcloud app versions list -show-traffic

C. gcloud app versions list -traffic

D. gcloud app versions list

**55. You work for a big multinational financial company that has several hundreds of Google Cloud Projects for various development, test and production workloads. Financial regulations require your company to store all audit files for three years. What should you do to implement a log retention solution while minimizing storage cost?**

A. Export audit logs from Cloud Logging to Cloud Pub/Sub via an export sink. Configure a Cloud Dataflow pipeline to process these messages and store them in Cloud SQL for MySQL.

B. Write a script that exports audit logs from Cloud Logging to BigQuery. Use Cloud Scheduler to trigger the script every hour.

C. Export audit logs from Cloud Logging to Coldline Storage bucket via an export sink.

D. Export audit logs from Cloud Logging to BigQuery via an export sink.

**56. Your company has three GCP projects – for development, test and production environments. The budgeting team in the finance department needs to know the cost estimates for the next financial year to include it in the budget. They have years of experience using SQL and need to group costs by parameters such as duration (day/week/month/quarter), service type, region, etc. How can you enable this?**

A. Export billing data to a Google Cloud Storage bucket. Manually copy the data from Cloud Storage bucket to a Google sheet. Ask the budgeting team to apply formulas in the Google sheet to

analyze current costs and estimate future costs.

B. Export billing data to a BigQuery dataset. Ask the budgeting team to run queries against BigQuery to analyze current costs and estimate future costs.

C. Download the costs as CSV file from the Cost Table page. Ask the budgeting team to open this file Microsoft Excel and apply formulas to analyze current costs and estimate future costs.

D. Export billing data to a Google Cloud Storage bucket. Trigger a Cloud Function that reads the data and inserts into Cloud BigTable. Ask the budgeting team to run queries against BigTable to analyze current costs and estimate future costs.

**57. 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 bucket. Create a JSON key for the service account. Execute the command gsutil signurl -m 1h gs:///\*.

B. Create a service account with just the permissions to access files in the bucket. Create a JSON key for the service account. Execute the command gsutil signurl -d 1h gs:///\*\*.

C. Create a service account with just the permissions to access files in the bucket. Create a JSON key for the service account. Execute the command gsutil signurl -p 60m gs:///.

D. Create a JSON key for the Default Compute Engine Service Account. Execute the command gsutil signurl -t 60m gs:///\*\*\*

**59. You want to find a list of regions and the prebuilt images offered by Google Compute Engine. Which commands should you execute to retrieve this information?**

A. gcloud compute regions list, gcloud images list

B. gcloud compute regions list, gcloud compute images list

C. gcloud regions list, gcloud images list

D. gcloud regions list, gcloud compute images list

**60. Your company produces documentary videos for a reputed television channel and stores its videos in Google Cloud Storage for long term archival. Videos older than 90 days are accessed only in exceptional circumstances and videos older than one year are no longer needed. How should you optimise the storage to reduce costs?**

A. Use a Cloud Function to rewrite the storage class to Coldline for objects older than 90 days. Use another Cloud Function to delete objects older than 365 days from Coldline Storage Class.

B. Use a Cloud Function to rewrite the storage class to Coldline for objects older than 90 days. Use another Cloud Function to delete objects older than 275 days from Coldline Storage Class.

C. Configure a lifecycle rule to transition objects older than 90 days to Coldline Storage Class. Configure another lifecycle rule to delete objects older than 275 days from Coldline Storage Class.

D. Configure a lifecycle rule to transition objects older than 90 days to Coldline Storage Class. Configure another lifecycle rule to delete objects older than 365 days from Coldline Storage Class.

# ANSWER:

|  |  |  |
| --- | --- | --- |
| 1 C | 21 C | 41 A |
| 2 D | 22 cde | 42 C |
| 3 C | 23 C | 43 C |
| 4 C | 24 C | 44 C |
| 5 C | 25 B | 45 C |
| 6 D | 26 A E | 46 C |
| 7 B | 27 B | 47 A |
| 8 C | 28 D | 48 C |
| 9 C | 29 B | 49 B |
| 10 D | 30 A | 50 C |
| 11 B | 31 A | 51B |
| 12 D | 32 B | 52 B |
| 13 A | 33 B | 53 C |
| 14 B | 34 B D | 54 B |
| 15 C | 35 B | 55 C |
| 16 D | 36 B C | 56 B |
| 17 D | 37 B | 57 A |
| 18 A | 38 B | 58 B |
| 19 B | 39 A | 59 B |
| 20 D | 40 D | 60 B |

# QUESTIONS:

**1.You want to use Google Cloud Storage to host a static website on www.example.com for your staff. You created a bucket example-static-website and uploaded index.html and CSS files to it. You turned on static website hosting on the bucket and set up a CNAME record on www.example.com to point to :.storage.googleapis.com. You access the static website by navigating to www.example.com in the browser but your index page is not displayed. What should you do?**

A. Reload the Cloud Storage static website server to load the objects.

B. In example.com zone, modify the CNAME record to storage.googleapis.com/example-static-website

C. Delete the existing bucket, create a new bucket with the name www.example.com and upload the html/css files.

D. In example.com zone, delete the existing CNAME record and set up an A record instead to point to c.storage.googleapis.com.

**2. You developed an enhancement to a production application deployed in App Engine Standard service. Unit testing and user acceptance testing has succeeded, and you deployed the new version to production. Users have started complaining of slow performance after the recent update, and you need to revert to the previous version immediately. How can you do this?**

A. Deploy the previous version as a new App Engine Application and use traffic splitting feature to send all traffic to the new application.

B. In the App Engine Console, identify the App Engine application and select Revert.

C. In the App Engine Console, identify the App Engine application versions and make the previous version the default to route all traffic to it.

D. Execute gcloud app restore to rollback to the previous version

**3. You deployed a java application in a single Google Cloud Compute Engine VM. During peak usage, the application CPU is maxed out and results in stuck threads which ultimately make the system unresponsive, and requires a reboot. Your operations team want to receive an email alert when the CPU utilization is greater than 95% for more than 10 minutes so they can manually change the instance type to another instance that offers more CPU. What should you do?**

A. Link the GCP project to a Cloud Monitoring workspace. Configure an Alerting policy based on CPU utilization in Cloud Monitoring and trigger an email notification when the utilization exceeds the threshold.

B. Write a custom script to monitor CPU usage and send an email notification when the usage exceeds the threshold.

C. In Cloud Logging, create logs based metric for CPU usage and store it as a custom metric in Cloud Monitoring. Create an Alerting policy based on CPU utilization in Cloud Monitoring and trigger an email notification when the utilization exceeds the threshold.

D. Link the project to a Cloud Monitoring workspace. Write a custom script that captures CPU utilization every minute and sends to Cloud Monitoring as a custom metric. Add an uptime check based on the CPU utilization.

**4. You plan to deploy an application on an autoscaled managed instances group. The application uses a tomcat server and runs on port 8080. You want to access the application on https://www.example.com. You want to follow Google recommended practices. What services would you use?**

A. Google DNS, Google CDN, SSL Proxy Load Balancer

B. Google Domains, Cloud DNS private zone, SSL Proxy Load Balancer

C. Google Domains, Cloud DNS private zone, HTTP(S) Load Balancer

D. Google Domains, Cloud DNS, HTTP(S) Load Balancer

**5. our operations team have deployed an update to a production application running in Google Cloud App Engine Standard service. The deployment was successful, but your operations are unable to find this deployment in the production GCP project. What should you do?**

A. Review the project settings in the App Engine application configuration files.

B. Review the properties of the active gcloud configurations by executing gcloud config list.

C. Review the project settings in the App Engine deployment YAML file.

D. Review the project settings in the Deployment Manager console.

**6. You have a Cloud Function that is triggered every night by Cloud Scheduler. The Cloud Function creates a snapshot of VMs running in all projects in the department. Your team created a new project ptech-vm, and you now need to provide IAM access to the service account used by the Cloud Function to let it create snapshots of VMs in the new ptech-vm project. You want to follow Google recommended practices. What should you do?**

A. Grant Compute Storage Admin IAM role on the ptech-vm project to the service account used by the Cloud Function.

B. Use gcloud to generate a JSON key for the existing service account used by the Cloud Function. Add a metadata tag to all compute engine instances in the ptech-vm project with key: service-account and value: .

C. Set the scope of the service account to Read/Write when provisioning compute engine instances in the ptech-vm project.

D. Use gcloud to generate a JSON key for the existing service account used by the Cloud Function. Register the JSON key as SSH key on all VM instances in the ptech-vm project.

**7. Your company has multiple GCP projects in several regions, and your operations team have created numerous gcloud configurations for most common operational needs. They have asked your help to retrieve an inactive gcloud configuration and the GKE clusters that use it, using the least number of steps. What command should you execute to retrieve this information?**

A. Execute gcloud config configurations describe.

B. Execute gcloud config configurations activate, then gcloud config list.

C. Execute kubectl config use-context, then kubectl config view.

D. Execute kubectl config get-contexts.

**8. Your team uses Splunk for centralized logging and you have a number of reports and dashboards based on the logs in Splunk. You want to install Splunk forwarder on all nodes of your new Kubernetes Engine Autoscaled Cluster. The Splunk forwarder forwards the logs to a centralized Splunk Server. You want to minimize operational overhead. What is the best way to install Splunk Forwarder on all nodes in the cluster?**

A. SSH to each node and run a script to install the forwarder agent.

B. Include the forwarder agent in a DaemonSet deployment.

C. Use Deployment Manager to orchestrate the deployment of forwarder agents on all nodes.

D. Include the forwarder agent in a StatefulSet deployment.

**9.What is the gcloud command to set default zone for compute engine server using gcloud cli?**

A. gcloud config set compute/zone us-east-1  
B. gcloud config configurations set compute/zone us-east-1a  
C. gcloud config set compute/zone us-east1-a  
D. gcloud defaults set compute/zone us-east-1

**10.** **As a cloud engineer, you have been asked to upgrade the free trial of your account and rename it to a production-inventory system. You are getting permission denied error while making the changes. Which of the following permissions will solve the problem?**

A. Billing.accounts.update  
B. Billing.account.upgrade  
C. Billing.account.update  
D. Billing.accounts.upgrade

**11.** **Which of the following role provide granular access for a specific service and is managed by GCP?**

A. Custom  
B. Predefined  
C. Admin  
D. Primitive

**12.** **Your company has 5 TB of testing data stored in the production database of a testing tool name Quality Center. The data is being used to create a real-time analytics system which is causing the slow response to the tester while using the tool. What should you do the improve the load on the database?**

A. Set up Multi-AZ  
B. Set up a read replica  
C. Scale the database instance  
D. Run the analytics query only weekends

**13.** **You have been asked to list the name of active account using gcloud CLI. Which of the following command will you use?**

A. Gcloud config list  
B. Gcloud auth list  
C. Gcloud account list  
D. Gcloud project list

**14.** **What does the CIDR 10.0.2.0/26 correspond to?**

A. 10.0.2.0 – 10.0.2.26  
B. 10.0.2.0 – 10.0.2.63  
C. 10.0.0.0 – 10.0.63.0  
D. 10.0.2.0 – 10.0.0.26

**15**. **A cloud engineer wants to create a VM named whiz-server-1 with four CPUs. Which of the following commands would he use to create the VM whiz-server-1?**

A. gcloud compute instances create –machine-type=n1-standard-4 whiz-server-1  
B. gcloud compute instances create –cpus=4 whiz-server-1  
C. gcloud compute instances create –machine-type=n1-standard-4 –instancename whiz-server-1  
D. gcloud compute instances create –machine-type=n1-4-cpu whiz-server-1

**16.** **You have set a firewall rule that will permit inbound connections to a VM instance named whizserver-2. You want to apply this rule only if there is not another rule that would deny that traffic. What priority would you give to this rule?**

A. 1000  
B. 1  
C. 65535  
D. 0

**17.** **You want your application hosted on a VM to fetch metadata of that instance. Which command will help you to fetch it?**

A. curl metadata.google.internal/compute-metadata/v1/  
B. curl <instance-private-ip>/metadata/v1/  
C. curl metadata.google.internal/computeMetadata/v1/  
D. curl internal.googleapi.com/computeMetadata/v1/

**18.** **You have 100TB of non-relational data and want to run analytics on it to see previous year net sales. Which tool suits best to your requirement?**

A. BigQuery  
B. BigTable  
C. Datastore  
D. GCS

**19.** **You are hired by an oil company that wants you to lead the migration of Oracle DB and DB2 to Google Cloud. Which of the following is the best option?**

A. CloudSQL for Oracle and VM for DB2  
B. CloudSQL for both Oracle and DB2  
C. VM for both Oracle and DB2  
D. Google App Engine for both Oracle and DB2

**20.** **A client of yours want you to migrate its on-premise MySQL data to Google Cloud without any downtime. Which service will you use for migrating SQL data to Cloud?**

A. Cloud Migration  
B. Anthos  
C. CloudSQL  
D. Cloud Run

**21.** **You are starting to work on a client’s project who is looking for a database service within Google Cloud which is horizontally scalable, supports gigabyte size of relational data and even supports ACID for reliable storage of data. Which service will you recommend?**

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

**22**. **You are distributing the traffic between a fleet of VMs within your VPC using Internal TCP/UDP Load Balancer. Which of the following specification does not support the selected Load Balancing Type?**

A. Preserved Client IP  
B. Global Availability  
C. Internal Load Balancing  
D. Any Destination Ports

**23.** **A developer has asked you to create a single nginx server for dev environment. Which service would allow you to launch VM using predefined images?**

A. GKE  
B. GAE  
C. CloudSQL  
D. Marketplace

**24.** **Your company has received a new project where it needs to migrate on-premise servers and data to Google Cloud gradually but until then you need to setup a VPN tunnel between on-premise and Google Cloud. Which service will you use in conjunction with Cloud VPN for a smooth setup?**

A. Cloud CDN  
B. Cloud NAT  
C. Cloud Run  
D. Cloud Router

**25.** **Your company is running a high availability deployment “hello-server” in Kubernetes Engine on port 8080 which needs to be exposed to public internet using a load balancer on port 80. Which of the following commands will help to accomplish this deployment?**

A. kubectl expose deployment hello-server –type LoadBalancer –port 8080 –target-port 80  
B. kubectl run deployment hello-server –type LoadBalancer –port 80 –target-port 8080  
C. kubectl expose deployment hello-server –type LoadBalancer –port 80 –target-port 8080  
D. kubectl run deployment hello-server –type LoadBalancer –port 8080 –target-port 80

**26**. **Which of the following gcloud command lets you view the details of a custom subnet you created in a particular region?**

A. gcloud compute networks subnets view [SUBNET\_NAME] –region us-central1  
B. gcloud compute networks subnets describe [SUBNET\_NAME] –region us-central1  
C. gcloud compute networks subnets list [SUBNET\_NAME] –region us-central1  
D. gcloud compute networks subnets read [SUBNET\_NAME] –region us-central1

**27.** **Your company was bidding on a big data project form last few months and they have finally received the project. The project wants you to deploy Apache Spark clusters on Google Cloud. Which service will you use?**

A. DataFlow  
B. DataProc  
C. BigTable  
D. Cloud Composer

**28.** **Your company has purchased a threat detection service from a third party and have asked you to upload all network logs to the application. Which of the following service will meet your requirements?**

A. Activity Logs  
B. Flow Logs  
C. Network Logs  
D. System Logs

**29.** **One of your team members had accidentally included a service account private JSON key while pushing code to GitHub. What steps should you immediately perform?**

A. Delete the JSON file from GitHub.  
B. Delete the project and all its resources.  
C. Delete the JSON file from GitHub, remove the key from Google Cloud IAM and generate a new key for use.  
D. None of the above

**30.** **Your project manager wants to create a user for Aston Smith who is the new cloud SQL administrator in your organization. Which of the following role would give him the ability to manage specific instances but no ability to import or restore data from backups?**

A. Cloud SQL Editor  
B. Cloud SQL Admin  
C. Cloud SQL Viewer  
D. Cloud SQL Client

**31**. **As per your manager’s instruction, you created a custom VPC with a subnet mask of 24 which provides 256 IP addresses but are only able to use 252 addresses out of it. You manager is trying to figure out what’s going wrong and approaches you for the answer. What will you answer to your manager?**

**A.**Inform manager that you will recreate the VPC because you feel something went wrong while creating a subnet  
**B.**GCP reserves four IP addresses in each primary subnet range, because of which the usable IP count is 252  
**C.**It’s because your account has reached a soft limit for the number of private IP address space. Raise a request for a quota increase  
**D.**None of the above

32. **You work for a retail company that has a busy online store. As you are approaching New Year, you find that your e-store is getting more and more traffic. You ensure that your web servers are behind a managed instance group. However, you notice that the web tier is frequently scaling, sometimes multiple times in an hour. You need to prevent the instance group from scaling up and down so rapidly. Which of the following options would help you to achieve this?**

**A.**Change the auto scaling metric to use multiple metrics instead of just one metric  
**B.**Reduce the number of maximum instance count  
**C.**Associate a health check with instance group  
**D.**Increase the cool down period

**33.** **A developer accidentally deleted some of the files from a bucket. Luckily, the files were not critical and were re-created soon. Because of this, your team lead has asked you to enable versioning on bucket. Which command would help you enable the same?**

**A.**gsutil versioning enable gs://whizlabs-bucket  
**B.**gsutil gs://whizlabs-bucket enable versioning  
**C.**gsutil enable versioning gs://whizlabs-bucket  
**D.**gsutil versioning set on gs://whizlabs-bucket

**34.** **A bug has been identified within your Python application which is hosted using App Engine and you are about to rollout a new version of the application to resolve the bug, but do not want the traffic to automatically shift to new version just to make sure the new version does not break anything. How would you achieve it?**

**A.**Pass a custom version ID so that App Engine does not send traffic to new version  
**B.**Pass –no-promote flag while deploying new version  
**C.**Pass –no-active flag while deploying new version  
**D.**Use –inactive-mode flag while deploying new version of the app

**35.** **You are trying to fetch metadata of a VM using “curl metadata.google.internal/computeMetadata/v1/” command but are constantly receiving 403 Forbidden. What could be the possible reason?**

**A.**Service account is missing  
**B.**Metadata-Flavor: Google header is missing  
**C.**Metadata-Access: Google header is missing  
**D.**Firewall rule attached to the VM is blocking the request

**36**. **What is the command for creating a storage bucket that has once per month access and is named ‘archive\_bucket’?**

**A.**gsutil rm -coldline gs://archive\_bucket  
**B.**gsutil mb -c coldline gs://archive\_bucket  
**C.**gsutil mb -c nearline gs://archive\_bucket  
**D.**gsutil mb gs://archive\_bucket

**37.** **You need to deploy an update to an application in Google App Engine. The update is risky, but it can only be tested in a live environment. What is the best way to introduce the update to minimize risk?**

**A.**Deploy a new version of the application but use traffic splitting to only direct a small number of users to the new version  
**B.**Deploy the application temporarily and be prepared to pull it back if needed  
**C.**Warn users that a new app version may have issues and provide a way to contact you if there are problems  
**D.**Create a new project with the new app version, then redirect users to the new version

**38.** **You have created a Kubernetes engine cluster named ‘mycluster’. You’ve realized that you need to change the machine type for the cluster from n1-standard-1 to n1-standard-4. What is the command to make this change?**

**A.**You must create a new node pool in the same cluster and migrate the workload to the new pool  
**B.**gcloud container clusters update mycluster –machine-type n1-standard-4  
**C.**This action is not possible  
**D.**gcloud container clusters resize mycluster –machine-type n1-standard-4

**39.** **You have recently joined a startup and have been asked to create a new Google Cloud account for the company along with setting up budget alarm of $100. You have setup an alarm with 40%, 60%, 90% and 100% threshold. What will happen once the threshold of 100% is reached?**

**A.**A notification will be sent to Project Owner & Billing Admins  
**B.**Your project will deleted because you have depleted all your budget  
**C.**All VMs will be stopped so that you don’t exceed your budget  
**D.**A notification will be sent to Billing Admins and Billing Users

**40.** **Your company is hosting 10TB of customer data in BigQuery. The CTO of the company has decided to use this data and build some analytics on top of data which they have. At the end of the first month there was a huge spike in the bill due to use of BigQuery and CFO was not happy with the same. He has asked you to cut down the cost. How can you achieve this?**

**A.**Use GROUP BY clause  
**B.**Use composite keys to query the data  
**C.**Instead of using SELECT \*, query only required columns  
**D.**Use JOINS in the query to fetch data

**41.** **here are 15 VMs in your company’s Google Cloud account which have public IP address but are ephemeral. Your manager asked you to assign static public IP to each instance. During the process you were able to assign IPs to only 5 of the VMs and were receiving error of all other instances. What can be the reason?**

**A.**You have reached the hard limit of using static IP addresses  
**B.**Your quota has been exhausted and you can raise a request to increase it  
**C.**Not all OS supports static public IP so check if the OS on VM supports static IP  
**D.**You need to first remove existing public IP attached to VMs and then attach static IP to them

42. **You are trying to get Google Kubernetes server configuration of a project by running the command gcloud container get-server-config, when you hit enter, you get an error message: “There was a problem refreshing your current auth tokens: invalid\_grant: Bad Request”. What would you do to successfully run this command and get the server configuration from Kubernetes?**

**A.**gcloud auth login  
**B.**gcloud config set account [ACCOUNT]  
**C.**gcloud config set project [PROJECT\_ID]  
**D.**gcloud components update

**43.** **You have an application running on Google Cloud VM written in C#.Net from last few weeks. Suddenly you experience elevated latency and poor performance among application endpoints. Which service can help you troubleshoot this issue?**

**A.**Stackdriver Profiler  
**B.**Stackdriver Monitoring  
**C.**Activity Logs  
**D.**Stackdriver Trace

**44.** **Your project manager wants to create a user for Aston Smith who is the new cloud SQL administrator in your organization. Which of the following role would give him the ability to manage specific instances but no ability to import or restore data from backups?**

**A.**Cloud SQL Editor  
**B.**Cloud SQL Admin  
**C.**Cloud SQL Viewer  
**D.**Cloud SQL Client

**45.** **You have about 20TB of data which is not accessed and the data team decided to archive them in the cloud. The team is looking for a storage solution that is highly available with minimum costs. On the other hand, the data may be accessed a couple of times a year for reconciliation purposes.**  
**Which of the following choices best satisfy data team’s requirements?**

**A.**Google Storage Standard  
**B.**Google Storage Nearline  
**C.**Google Storage Coldline  
**D.**BigQuery

**46.** **You have an on-premises MySQL database that you have been asked to move to Google Cloud. Users should run SQL queries to fetch data from the database. Your solution should be cost-effective and allow increasing read capacities in the future. Which of the following Google Cloud products is the best for this scenario?**

**A.**Cloud Storage  
**B.**Cloud Spanner  
**C.**Cloud SQL  
**D.**Cloud Datastore

**47.** **You have created a pre-populated PersistentVolume disk as ReadOnlyMany, when you try to mount the volume to a POD, you fail to mount error, what could be the most likely reason for this failure?**

**A.**You created a PersistentVolume but did not create a PersistentVolumeClaim  
**B.**You have not specified the correct mount point in your pod.yaml file  
**C.**You entered an incorrect PersistentVolume name in the pod.yaml file  
**D.**The pod.yaml file doesn’t have permission to mount the volume as it is created with ReadOnlyMany access.

**48.** **Configure access and securityYou company has developed an application to accelerate the efficiency in making sales calls about the product of your client. Everytime a recipient is called, log sink is used to export the record to a destination. Which of the following destinations are supported? Choose any 2.**

**A.**BigQuery  
**B.**Cloud Spanner  
**C.**Pub/Sub  
**D.**Cloud Bigtable

**49.** **A health care company that provides medical service to the users want to track their network forensics, real-time security analysis and optimize the expense. The manager would like to track the network sent from and received by VM instances. What do you suggest they do?**

**A.**Pub/Sub  
**B.**VPC Flow Logs  
**C.**VPC Monitoring  
**D.**Cloud Storage

**50. 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 Spanner. Set up your instance with 2 nodes.

D. Select Cloud Spanner. Set up your instance as multi-regional.

**51. You want to configure autohealing for network load balancing for a group of Compute Engine instances that run in multiple zones, using the fewest possible steps.You need to configure re-creation of VMs if they are unresponsive after 3 attempts of 10 seconds each. What should you do?**

A. Create an HTTP load balancer with a backend configuration that references an existing instance group. Set the health check to healthy (HTTP)

B. Create an HTTP load balancer with a backend configuration that references an existing instance group. Define a balancing mode and set the maximum RPS to 10.

C. Create a managed instance group. Set the Autohealing health check to healthy (HTTP)

D. Create a managed instance group. Verify that the autoscaling setting is on.

**52. You are using multiple configurations for gcloud. You want to review the configured Kubernetes Engine cluster of an inactive configuration using the fewest possible steps. What should you do?**

A. Use gcloud config configurations describe to review the output.

B. Use gcloud config configurations activate and gcloud config list to review the output.

C. Use kubectl config get-contexts to review the output.

D. Use kubectl config use-context and kubectl config view to review the output.

**53. 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

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

A. Contact cloud-billing@google.com with your bank account details and request a corporate billing account for your company.

B. Create a ticket with Google Support and wait for their call to share your credit card details over the phone.

C. In the Google Platform Console, go to the Resource Manage and move all projects to the root Organizarion.

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

**55. You have an application that looks for its licensing server on the IP 10.0.3.21. You need to deploy the licensing server on Compute Engine. You do not want to change the configuration of the application and want the application to be able to reach the licensing server. What should you do?**

A. Reserve the IP 10.0.3.21 as a static internal IP address using gcloud and assign it to the licensing server.

B. Reserve the IP 10.0.3.21 as a static public IP address using gcloud and assign it to the licensing server.

C. Use the IP 10.0.3.21 as a custom ephemeral IP address and assign it to the licensing server.

D. Start the licensing server with an automatic ephemeral IP address, and then promote it to a static internal IP address.

**56. 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.

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

A. Use gcloud iam roles copy and specify the production project as the destination project.

B. Use gcloud iam roles copy and specify your organization as the destination organization.

C. In the Google Cloud Platform Console, use the 'create role from role' functionality.

D. In the Google Cloud Platform Console, use the 'create role' functionality and select all applicable permissions.

**58. 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 Registry. Create a Deployment YAML file to point to that image. Use kubectl to create the deployment with that file.

D. Create a docker image from the Dockerfile and upload it to Cloud Storage. Create a Deployment YAML file to point to that image. Use kubectl to create the deployment with that file.

**59. 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>

**60. 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 read. Then convert that bytes estimate to dollars using the Pricing Calculator.

C. Use the command line to run a dry run query to estimate the number of bytes returned. Then convert that bytes estimate to dollars using the Pricing Calculator.

D. Run a select count (\*) to get an idea of how many records your query will look through. Then convert that number of rows to dollars using the Pricing Calculator.

# ANSWER:

|  |  |  |
| --- | --- | --- |
| 1 D | 21 D | 41 B |
| 2 C | 22 B | 42 A |
| 3 A | 23 D | 43 D |
| 4 C | 24 D | 44 A |
| 5 B | 25 C | 45 C |
| 6 A | 26 B | 46 C |
| 7 D | 27 D | 47 A |
| 8 B | 28 B | 48 A C |
| 9 C | 29 C | 49 B |
| 10 C | 30 A | 50 A |
| 11 B | 31 B | 51 C |
| 12 B | 32 D | 52 D |
| 13 B | 33 D | 53 D |
| 14 B | 34 B | 54 D |
| 15 A | 35 B | 55 A |
| 16 C | 36 B | 56 D |
| 17 C | 37 A | 57 A |
| 18 B | 38 A | 58 C |
| 19 C | 39 D | 59 B |
| 20 C | 40 C | 60 B |

# QUESTIONS:

**1. 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.

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

A. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 275 days (365 ג€" 90)

B. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 365 days.

C. Use gsutil rewrite and set the Delete action to 275 days (365-90).

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

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

A. When creating the VM via the web console, specify the service account under the 'Identity and API Access' section.

B. Download a JSON Private Key for the service account. On the Project Metadata, add that JSON as the value for the key compute-engine-service- account.

C. Download a JSON Private Key for the service account. On the Custom Metadata of the VM, add that JSON as the value for the key compute-engine- service-account.

D. Download a JSON Private Key for the service account. After creating the VM, ssh into the VM and save the JSON under ~/.gcloud/compute-engine-service- account.json.

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

A. Cloud Pub/Sub, Cloud Dataflow, Cloud Datastore, BigQuery

B. Firebase Messages, Cloud Pub/Sub, Cloud Spanner, BigQuery

C. Cloud Pub/Sub, Cloud Storage, BigQuery, Cloud Bigtable

D. Cloud Pub/Sub, Cloud Dataflow, Cloud Bigtable, BigQuery

**5. 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.

**6. 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.

**7. You need to set up permissions for a set of Compute Engine instances to enable them to write data into a particular Cloud Storage bucket. You want to follow  
Google-recommended practices. What should you do?**

A. Create a service account with an access scope. Use the access scope 'https://www.googleapis.com/auth/devstorage.write\_only'.

B. Create a service account with an access scope. Use the access scope 'https://www.googleapis.com/auth/cloud-platform'.

C. Create a service account and add it to the IAM role 'storage.objectCreator' for that bucket.

D. Create a service account and add it to the IAM role 'storage.objectAdmin' for that bucket.

**8. You have sensitive data stored in three Cloud Storage buckets and have enabled data access logging. You want to verify activities for a particular user for these buckets, using the fewest possible steps. You need to verify the addition of metadata labels and which files have been viewed from those buckets. What should you do?**

A. Using the GCP Console, filter the Activity log to view the information.

B. Using the GCP Console, filter the Stackdriver log to view the information.

C. View the bucket in the Storage section of the GCP Console.

D. Create a trace in Stackdriver to view the information.

**9. You are the project owner of a GCP project and want to delegate control to colleagues to manage buckets and files in Cloud Storage. You want to follow Google- recommended practices. Which IAM roles should you grant your colleagues?**

A. Project Editor

B. Storage Admin

C. Storage Object Admin

D. Storage Object Creator

**10. 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 company. Delete the object from the storage bucket after four hours.

D. Create a new Cloud Storage bucket specifically for the external company to access. Copy the object to that bucket. Delete the bucket after four hours have passed.

**11. 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.

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

A. Enable the Cloud Pub/Sub API in the API Library on the GCP Console.

B. Rely on the automatic enablement of the Cloud Pub/Sub API when the Service Account accesses it.

C. Use Deployment Manager to deploy your application. Rely on the automatic enablement of all APIs used by the application being deployed.

D. Grant the App Engine Default service account the role of Cloud Pub/Sub Admin. Have your application enable the API on the first connection to Cloud Pub/ Sub.

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

A. Use Shared VPC to connect all projects, and link Stackdriver to one of the projects.

B. For each project, create a Stackdriver account. In each project, create a service account for that project and grant it the role of Stackdriver Account Editor in all other projects.

C. Configure a single Stackdriver account, and link all projects to the same account.

D. Configure a single Stackdriver account for one of the projects. In Stackdriver, create a Group and add the other project names as criteria for that Group.

**14. 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.

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

A. Run gcloud iam roles list. Review the output section.

B. Run gcloud iam service-accounts list. Review the output section.

C. Navigate to the project and then to the IAM section in the GCP Console. Review the members and roles.

D. Navigate to the project and then to the Roles section in the GCP Console. Review the roles and status.

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

A. Verify that you are Project Billing Manager for the GCP project. Update the existing project to link it to the existing billing account.

B. Verify that you are Project Billing Manager for the GCP project. Create a new billing account and link the new billing account to the existing project.

C. Verify that you are Billing Administrator for the billing account. Create a new project and link the new project to the existing billing account.

D. Verify that you are Billing Administrator for the billing account. Update the existing project to link it to the existing billing account.

**17. 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.

**18. You created a Google Cloud Platform project with an App Engine application inside the project. You initially configured the application to be served from the us- central region. Now you want the application to be served from the asia-northeast1 region. What should you do?**

A. Change the default region property setting in the existing GCP project to asia-northeast1.

B. Change the region property setting in the existing App Engine application from us-central to asia-northeast1.

C. Create a second App Engine application in the existing GCP project and specify asia-northeast1 as the region to serve your application.

D. Create a new GCP project and create an App Engine application inside this new project. Specify asia-northeast1 as the region to serve your application.

**19. 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.databaseUser. Add the users to the role.

B. Run gcloud iam roles describe roles/spanner.databaseUser. Add the users to a new group. Add the group to the role.

C. Run gcloud iam roles describe roles/spanner.viewer - -project my-project. Add the users to the role.

D. Run gcloud iam roles describe roles/spanner.viewer - -project my-project. Add the users to a new group. Add the group to the role.

**20. 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 ג€Container-Optimized OS (cos)ג€ as a node image for your GKE cluster.

**21. 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.

**22. 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.

**23. You are running an application on multiple virtual machines within a managed instance group and have autoscaling enabled. The autoscaling policy is configured so that additional instances are added to the group if the CPU utilization of instances goes above 80%. VMs are added until the instance group reaches its maximum limit of five VMs or until CPU utilization of instances lowers to 80%. The initial delay for HTTP health checks against the instances is set to 30 seconds.The virtual machine instances take around three minutes to become available for users. You observe that when the instance group autoscales, it adds more instances then necessary to support the levels of end-user traffic. You want to properly maintain instance group sizes when autoscaling. What should you do?**

A. Set the maximum number of instances to 1.

B. Decrease the maximum number of instances to 3.

C. Use a TCP health check instead of an HTTP health check.

D. Increase the initial delay of the HTTP health check to 200 seconds.

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

A. Select Google Kubernetes Engine. Use a single-node cluster with a small instance type.

B. Select Google Kubernetes Engine. Use a three-node cluster with micro instance types.

C. Select Compute Engine. Use preemptible VM instances of the appropriate standard machine type.

D. Select Compute Engine. Use VM instance types that support micro bursting

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

A. Run gcloud app restore.

B. On the App Engine page of the GCP Console, select the application that needs to be reverted and click Revert.

C. On the App Engine Versions page of the GCP Console, route 100% of the traffic to the previous version.

D. Deploy the original version as a separate application. Then go to App Engine settings and split traffic between applications so that the original version serves 100% of the requests.

**26. 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.

**27. 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 instances. Set the 'Automatic Restart' to on. Set the 'On-host maintenance' to Migrate VM instance. Add the instance template to an instance group.

B. Create an instance template for the instances. Set 'Automatic Restart' to off. Set 'On-host maintenance' to Terminate VM instances. Add the instance template to an instance group.

C. Create an instance group for the instances. Set the 'Autohealing' health check to healthy (HTTP).

D. Create an instance group for the instance. Verify that the 'Advanced creation options' setting for 'do not retry machine creation' is set to off.

**28. You host a static website on Cloud Storage. Recently, you began to include links to PDF files on this site. Currently, when users click on the links to these PDF files, their browsers prompt them to save the file onto their local system. Instead, you want the clicked PDF files to be displayed within the browser window directly, without prompting the user to save the file locally. What should you do?**

A. Enable Cloud CDN on the website frontend.

B. Enable 'Share publicly' on the PDF file objects.

C. Set Content-Type metadata to application/pdf on the PDF file objects.

D. Add a label to the storage bucket with a key of Content-Type and value of application/pdf.

**29. You have a virtual machine that is currently configured with 2 vCPUs and 4 GB of memory. It is running out of memory. You want to upgrade the virtual machine to have 8 GB of memory. What should you do?**

A. Rely on live migration to move the workload to a machine with more memory.

B. Use gcloud to add metadata to the VM. Set the key to required-memory-size and the value to 8 GB.

C. Stop the VM, change the machine type to n1-standard-8, and start the VM.

D. Stop the VM, increase the memory to 8 GB, and start the VM.

**30. you have production and test workloads that you want to deploy on Compute Engine. Production VMs need to be in a different subnet than the test VMs. All the  
VMs must be able to reach each other over Internal IP without creating additional routes. You need to set up VPC and the 2 subnets. Which configuration meets these requirements?**

A. Create a single custom VPC with 2 subnets. Create each subnet in a different region and with a different CIDR range.

B. Create a single custom VPC with 2 subnets. Create each subnet in the same region and with the same CIDR range.

C. Create 2 custom VPCs, each with a single subnet. Create each subnet in a different region and with a different CIDR range.

D. Create 2 custom VPCs, each with a single subnet. Create each subnet in the same region and with the same CIDR range.

**31. 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.

**32. Your company has a Google Cloud Platform project that uses BigQuery for data warehousing. Your data science team changes frequently and has few members.  
You need to allow members of this team to perform queries. You want to follow Google-recommended practices. What should you do?**

A. 1. Create an IAM entry for each data scientist's user account. 2. Assign the BigQuery jobUser role to the group.

B. 1. Create an IAM entry for each data scientist's user account. 2. Assign the BigQuery dataViewer user role to the group.

C. 1. Create a dedicated Google group in Cloud Identity. 2. Add each data scientist's user account to the group. 3. Assign the BigQuery jobUser role to the group.

D. 1. Create a dedicated Google group in Cloud Identity. 2. Add each data scientist's user account to the group. 3. Assign the BigQuery dataViewer user role to the group.

**33. Your projects incurred more costs than you expected last month. Your research reveals that a development GKE container emitted a huge number of logs, which resulted in higher costs. You want to disable the logs quickly using the minimum number of steps. What should you do?**

A. 1. Go to the Logs ingestion window in Stackdriver Logging, and disable the log source for the GKE container resource.

B. 1. Go to the Logs ingestion window in Stackdriver Logging, and disable the log source for the GKE Cluster Operations resource.

C. 1. Go to the GKE console, and delete existing clusters. 2. Recreate a new cluster. 3. Clear the option to enable legacy Stackdriver Logging.

D. 1. Go to the GKE console, and delete existing clusters. 2. Recreate a new cluster. 3. Clear the option to enable legacy Stackdriver Monitoring.

**34. You have a website hosted on App Engine standard environment. You want 1% of your users to see a new test version of the website. You want to minimize complexity. What should you do?**

A. Deploy the new version in the same application and use the --migrate option.

B. Deploy the new version in the same application and use the --splits option to give a weight of 99 to the current version and a weight of 1 to the new version.

C. Create a new App Engine application in the same project. Deploy the new version in that application. Use the App Engine library to proxy 1% of the requests to the new version.

D. Create a new App Engine application in the same project. Deploy the new version in that application. Configure your network load balancer to send 1% of the traffic to that new application.

**35. 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 template. Add the group to the backend service for the load balancer. When all instances in the new managed instance group are healthy, delete the old managed instance group.

D. Create a new instance template with the new application version. Update the existing managed instance group with the new instance template. Delete the instances in the managed instance group to allow the managed instance group to recreate the instance using the new instance template.

**36. You are building an application that stores relational data from users. Users across the globe will use this application. Your CTO is concerned about the scaling requirements because the size of the user base is unknown. You need to implement a database solution that can scale with your user growth with minimum configuration changes. Which storage solution should you use?**

A. Cloud SQL

B. Cloud Spanner

C. Cloud Firestore

D. Cloud Datastore

**37. You are the organization and billing administrator for your company. The engineering team has the Project Creator role on the organization. You do not want the engineering team to be able to link projects to the billing account. Only the finance team should be able to link a project to a billing account, but they should not be able to make any other changes to projects. What should you do?**

A. Assign the finance team only the Billing Account User role on the billing account.

B. Assign the engineering team only the Billing Account User role on the billing account.

C. Assign the finance team the Billing Account User role on the billing account and the Project Billing Manager role on the organization.

D. Assign the engineering team the Billing Account User role on the billing account and the Project Billing Manager role on the organization.

**38. 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: Internal 3. 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.

**39. 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.

**40. 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.

**41. 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. 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 Google Cloud. 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.

**42. You want to deploy an application on Cloud Run that processes messages from a Cloud Pub/Sub topic. You want to follow Google-recommended practices. What should you do?**

A. 1. Create a Cloud Function that uses a Cloud Pub/Sub trigger on that topic. 2. Call your application on Cloud Run from the Cloud Function for every message.

B. 1. Grant the Pub/Sub Subscriber role to the service account used by Cloud Run. 2. Create a Cloud Pub/Sub subscription for that topic. 3. Make your application pull messages from that subscription.

C. 1. Create a service account. 2. Give the Cloud Run Invoker role to that service account for your Cloud Run application. 3. Create a Cloud Pub/Sub subscription that uses that service account and uses your Cloud Run application as the push endpoint.

D. 1. Deploy your application on Cloud Run on GKE with the connectivity set to Internal. 2. Create a Cloud Pub/Sub subscription for that topic. 3. In the same Google Kubernetes Engine cluster as your application, deploy a container that takes the messages and sends them to your application.

**43. You want to deploy an application on Cloud Run that processes messages from a Cloud Pub/Sub topic. You want to follow Google-recommended practices. What should you do?**

A. 1. Create a Cloud Function that uses a Cloud Pub/Sub trigger on that topic. 2. Call your application on Cloud Run from the Cloud Function for every message.

B. 1. Grant the Pub/Sub Subscriber role to the service account used by Cloud Run. 2. Create a Cloud Pub/Sub subscription for that topic. 3. Make your application pull messages from that subscription.

C. 1. Create a service account. 2. Give the Cloud Run Invoker role to that service account for your Cloud Run application. 3. Create a Cloud Pub/Sub subscription that uses that service account and uses your Cloud Run application as the push endpoint.

D. 1. Deploy your application on Cloud Run on GKE with the connectivity set to Internal. 2. Create a Cloud Pub/Sub subscription for that topic. 3. In the same Google Kubernetes Engine cluster as your application, deploy a container that takes the messages and sends them to your application.

**44. You need to deploy an application, which is packaged in a container image, in a new project. The application exposes an HTTP endpoint and receives very few requests per day. You want to minimize costs. What should you do?**

A. Deploy the container on Cloud Run.

B. Deploy the container on Cloud Run on GKE.

C. Deploy the container on App Engine Flexible.

D. Deploy the container on GKE with cluster autoscaling and horizontal pod autoscaling enabled.

**45. Your manager asks you to deploy a workload to a Kubernetes cluster. You are not sure of the workloads resource requirements or how the requirements might vary depending on usage patterns, external dependencies, or other factors. You need a solution that makes cost-effective recommendations regarding CPU and memory requirements, and allows the workload to function consistently in any situation. You want to follow Google-recommended practices. What should you do?**

AConfigure the Horizontal Pod Autoscaler for availability, and configure the cluster autoscaler for suggestions.

BConfigure the Horizontal Pod Autoscaler for availability, and configure the Vertical Pod Autoscaler recommendations for suggestions.

CConfigure the Vertical Pod Autoscaler recommendations for availability, and configure the Cluster autoscaler for suggestions.

DConfigure the Vertical Pod Autoscaler recommendations for availability, and configure the Horizontal Pod Autoscaler for suggestions.

**46. Your customer wants you to create a secure website with autoscaling based on the compute instance CPU load. You want to enhance performance by storing static content in Cloud Storage. Which resources are needed to distribute the user traffic?**

A .An internal HTTP(S) load balancer together with Identity-Aware Proxy to allow only HTTPS traffic.

B .An external HTTP(S) load balancer to distribute the load and a URL map to target the requests for the static content to the Cloud Storage backend. Install the HTTPS certificates on the instance.

C.An external HTTP(S) load balancer with a managed SSL certificate to distribute the load and a URL map to target the requests for the static content to the Cloud Storage backend.

D.An external network load balancer pointing to the backend instances to distribute the load evenly. The web servers will forward the request to the Cloud Storage as needed

**47. You want to host your video encoding software on Compute Engine. Your user base is growing rapidly, and users need to be able 3 to encode their videos at any time without interruption or CPU limitations. You must ensure that your encoding solution is highly available, and you want to follow Google-recommended practices to automate operations. What should you do?**

A.Deploy your solution on multiple standalone Compute Engine instances, and increase the number of existing instances wnen CPU utilization on Cloud Monitoring reaches a certain threshold.

B.Deploy your solution on multiple standalone Compute Engine instances, and replace existing instances with high-CPU  
instances when CPU utilization on Cloud Monitoring reaches a certain threshold.

C.Deploy your solution to an instance group, and increase the number of available instances whenever you see high CPU utilization in Cloud Monitoring.

D.Deploy your solution to an instance group, and set the autoscaling based on CPU utilization.

**48. During a recent audit of your existing Google Cloud resources, you discovered several users with email addresses outside of your Google Workspace domain.**

**You want to ensure that your resources are only shared with users whose email addresses match your domain. You need to remove any mismatched users, and you want to avoid having to audit your resources to identify mismatched users. What should you do?**

A.Create a Cloud Scheduler task to regularly scan your projects and delete mismatched users.

B.Create a Cloud Scheduler task to regularly scan your resources and delete mismatched users.

C.Set an organizational policy constraint to limit identities by domain to automatically remove mismatched users.

D.Set an organizational policy constraint to limit identities by domain, and then retroactively remove the existing mismatched users.

**49. You have deployed an application on a Compute Engine instance. An external consultant needs to access the Linux-based instance. The consultant is connected to your corporate network through a VPN connection, but the consultant has no Google account. What should you do?**

A.Instruct the external consultant to use the gcloud compute ssh command line tool by using Identity-Aware Proxy to access the instance.

B.Instruct the external consultant to use the gcloud compute ssh command line tool by using the public IP address of the instance to access it.

C.Instruct the external consultant to generate an SSH key pair, and request the public key from the consultant.Add the public key to the instance yourself, and have the consultant access theinstance through SSH with their private key.

D.Instruct the external consultant to generate an SSH key pair, and request the private key from the consultant.  
Add the private key to the instance yourself, and have the consultant access the instance through SSH with their public key.

**50. You need to deploy an application in Google Cloud using savorless technology. You want to test a new version of the application with a small percentage of production traffic. What should you do?**

**A.**Deploy the application lo Cloud. Run. Use gradual rollouts for traffic spelling.

**B.**Deploy the application lo Google Kubernetes Engine. Use Anthos Service Mesh for traffic splitting.

**C.**Deploy the application to Cloud functions. Saucily the version number in the functions name.

**D.**Deploy the application to App Engine. For each new version, create a new service

**51. Your company developed an application to deploy on Google Kubernetes Engine. Certain parts of the application are not fault-tolerant and are allowed to have downtime Other parts of the application are critical and must always be available. You need to configure a Google Kubernetes Engine cluster while optimizing for cost. What should you do?**

A.Create a cluster with a single node-pool by using standard VMs. Label the fault-tolerant Deployments as spot-true.

B.Create a cluster with a single node-pool by using Spot VMs. Label the critical Deployments as spot-false.

C.Create a cluster with both a Spot W node pool and a rode pool by using standard VMs Deploy the critical.  
deployments on the Spot VM node pool and the fault; tolerant deployments on the node pool by using standard VMs.

D.Create a cluster with both a Spot VM node pool and by using standard VMs. Deploy the critical deployments on the mode pool by using standard VMs and the fault-tolerant deployments on the Spot VM node pool

# ANSWER:

|  |  |  |
| --- | --- | --- |
| 1 D | 21 A | 41 B |
| 2 A | 22 B | 42 D |
| 3 A | 23 D | 43 B |
| 4 D | 24 C | 44 A |
| 5 A | 25 C | 45 B |
| 6 A | 26 D | 46 C |
| 7 D | 27 A | 47 D |
| 8 B | 28 C | 48 C |
| 9 B | 29 D | 49 C |
| 10 A | 30 B | 50 A |
| 11 B | 31A | 51 D |
| 12 A | 32 D | 52 |
| 13 C | 33 A | 53 |
| 14 A | 34 B | 54 |
| 15 C | 35 B | 55 |
| 16 B | 36 B | 56 |
| 17 C | 37 C | 57 |
| 18 D | 38 C | 58 |
| 19 B | 39 B | 59 |
| 20 B | 40 A | 60 |

# QUESTION

1. 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 Spanner. Set up your instance with 2 nodes.

D. Select Cloud Spanner. Set up your instance as multi-regional.

2. You want to configure autohealing for network load balancing for a group of Compute Engine instances that run in multiple zones, using the fewest possible steps.  
You need to configure re-creation of VMs if they are unresponsive after 3 attempts of 10 seconds each. What should you do?

A. Create an HTTP load balancer with a backend configuration that references an existing instance group. Set the health check to healthy (HTTP)

B. Create an HTTP load balancer with a backend configuration that references an existing instance group. Define a balancing mode and set the maximum RPS to 10.

C. Create a managed instance group. Set the Autohealing health check to healthy (HTTP)

D. Create a managed instance group. Verify that the autoscaling setting is on.

3. You are using multiple configurations for gcloud. You want to review the configured Kubernetes Engine cluster of an inactive configuration using the fewest possible steps. What should you do?

A. Use gcloud config configurations describe to review the output.

B. Use gcloud config configurations activate and gcloud config list to review the output.

C. Use kubectl config get-contexts to review the output.

D. Use kubectl config use-context and kubectl config view to review the output.

4. 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

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

A. Contact cloud-billing@google.com with your bank account details and request a corporate billing account for your company.

B. Create a ticket with Google Support and wait for their call to share your credit card details over the phone.

C. In the Google Platform Console, go to the Resource Manage and move all projects to the root Organizarion.

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

6. You have an application that looks for its licensing server on the IP 10.0.3.21. You need to deploy the licensing server on Compute Engine. You do not want to change the configuration of the application and want the application to be able to reach the licensing server. What should you do?

A. Reserve the IP 10.0.3.21 as a static internal IP address using gcloud and assign it to the licensing server.

B. Reserve the IP 10.0.3.21 as a static public IP address using gcloud and assign it to the licensing server.

C. Use the IP 10.0.3.21 as a custom ephemeral IP address and assign it to the licensing server.

D. Start the licensing server with an automatic ephemeral IP address, and then promote it to a static internal IP address.

7. 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.

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

**A.**Use gcloud iam roles copy and specify the production project as the destination project.

**B.**Use gcloud iam roles copy and specify your organization as the destination organization.

**C.**In the Google Cloud Platform Console, use the ג€˜create role from roleג€™ functionality.

**D.**In the Google Cloud Platform Console, use the ג€˜create roleג€™ functionality and select all applicable permissions.

9. 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

10. You have a Docker file 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 Registry. Create a Deployment YAML file to point to that image. Use kubectl to create the deployment with that file.

D. Create a docker image from the Dockerfile and upload it to Cloud Storage. Create a Deployment YAML file to point to that image. Use kubectl to create the deployment with that file.

11. Your development team needs a new Jenkins server for their project. You need to deploy the server using the fewest steps possible. What should you do?

A. Download and deploy the Jenkins Java WAR to App Engine Standard.

B. Create a new Compute Engine instance and install Jenkins through the command line interface.

C. Create a Kubernetes cluster on Compute Engine and create a deployment with the Jenkins Docker image.

D. Use GCP Marketplace to launch the Jenkins solution.

12. 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>

13. 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 read. Then convert that bytes estimate to dollars using the Pricing Calculator.

C. Use the command line to run a dry run query to estimate the number of bytes returned. Then convert that bytes estimate to dollars using the Pricing Calculator.

D. Run a select count (\*) to get an idea of how many records your query will look through. Then convert that number of rows to dollars using the Pricing Calculator.

14. 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.

15. 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.

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

A. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 275 days (365 ג€" 90)

B. Use Cloud Storage Object Lifecycle Management using Age conditions with SetStorageClass and Delete actions. Set the SetStorageClass action to 90 days and the Delete action to 365 days.

C. Use gsutil rewrite and set the Delete action to 275 days (365-90).

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

17. 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 ג€˜Identity and API Accessג€™ section.

B. Download a JSON Private Key for the service account. On the Project Metadata, add that JSON as the value for the key compute-engine-service- account.

C. Download a JSON Private Key for the service account. On the Custom Metadata of the VM, add that JSON as the value for the key compute-engine- service-account.

D. Download a JSON Private Key for the service account. After creating the VM, ssh into the VM and save the JSON under ~/.gcloud/compute-engine-service- account.json.

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

A. Install a RDP client on your desktop. Verify that a firewall rule for port 3389 exists.

B. Install a RDP client in your desktop. Set a Windows username and password in the GCP Console. Use the credentials to log in to the instance.

C. Set a Windows password in the GCP Console. Verify that a firewall rule for port 22 exists. Click the RDP button in the GCP Console and supply the credentials to log in.

D. Set a Windows username and password in the GCP Console. Verify that a firewall rule for port 3389 exists. Click the RDP button in the GCP Console, and supply the credentials to log in.

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

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

B. Create two configurations using gcloud config configurations create [NAME]. Run gcloud configurations list to start the Compute Engine instances.

C. Activate two configurations using gcloud configurations activate [NAME]. Run gcloud config list to start the Compute Engine instances.

D. Activate two configurations using gcloud configurations activate [NAME]. Run gcloud configurations list to start the Compute Engine instances.

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

A. Use granular logging statements within a Deployment Manager template authored in Python.

B. Monitor activity of the Deployment Manager execution on the Stackdriver Logging page of the GCP Console.

C. Execute the Deployment Manager template against a separate project with the same configuration, and monitor for failures.

D. Execute the Deployment Manager template using the ג€"-preview option in the same project, and observe the state of interdependent resources.

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

Description automatically generated

A. Cloud Pub/Sub, Cloud Dataflow, Cloud Datastore, BigQuery

B. Firebase Messages, Cloud Pub/Sub, Cloud Spanner, BigQuery

C. Cloud Pub/Sub, Cloud Storage, BigQuery, Cloud Bigtable

D. Cloud Pub/Sub, Cloud Dataflow, Cloud Bigtable, BigQuery

22. 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.

23. 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 ג€˜logging.viewerג€™ and ג€˜bigQuery.dataViewerג€™ predefined IAM roles.

B. Add the auditors group to two new custom IAM roles.

C. Add the auditor user accounts to the ג€˜logging.viewerג€™ and ג€˜bigQuery.dataViewerג€™ predefined IAM roles.

D. Add the auditor user accounts to two new custom IAM roles.

24. You need to set up permissions for a set of Compute Engine instances to enable them to write data into a particular Cloud Storage bucket. You want to follow  
Google-recommended practices. What should you do?

A. Create a service account with an access scope. Use the access scope ג€˜https://www.googleapis.com/auth/devstorage.write\_onlyג€™.

B. Create a service account with an access scope. Use the access scope ג€˜https://www.googleapis.com/auth/cloud-platformג€™.

C. Create a service account and add it to the IAM role ג€˜storage.objectCreatorג€™ for that bucket.

D. Create a service account and add it to the IAM role ג€˜storage.objectAdminג€™ for that bucket.

25. You have sensitive data stored in three Cloud Storage buckets and have enabled data access logging. You want to verify activities for a particular user for these buckets, using the fewest possible steps. You need to verify the addition of metadata labels and which files have been viewed from those buckets. What should you do?

A. Using the GCP Console, filter the Activity log to view the information.

B. Using the GCP Console, filter the Stackdriver log to view the information.

C. View the bucket in the Storage section of the GCP Console.

D. Create a trace in Stackdriver to view the information

26. ou are the project owner of a GCP project and want to delegate control to colleagues to manage buckets and files in Cloud Storage. You want to follow Google- recommended practices. Which IAM roles should you grant your colleagues?

A. Project Editor

B. Storage Admin

C. Storage Object Admin

D. Storage Object Creator

27. 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 ג€˜publicג€™ and use object lifecycle management to remove the object after four hours.

C. Configure the storage bucket as a static website and furnish the objectג€™s URL to the company. Delete the object from the storage bucket after four hours.

D. Create a new Cloud Storage bucket specifically for the external company to access. Copy the object to that bucket. Delete the bucket after four hours have passed.

28. 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:

|  |  |  |
| --- | --- | --- |
| 1 A | 21 D | 41 |
| 2 C | 22 A | 42 |
| 3 A | 23 C | 43 |
| 4 D | 24 C | 44 |
| 5 D | 25 B | 45 |
| 6 A | 26 B | 46 |
| 7 D | 27 A | 47 |
| 8 A | 28 B | 48 |
| 9 A | 29 | 49 |
| 10 C | 30 | 50 |
| 11 D | 31 | 51 |
| 12 B | 32 | 52 |
| 13 B | 33 | 53 |
| 14 B | 34 | 54 |
| 15 D | 35 | 55 |
| 16 A | 36 | 56 |
| 17 A | 37 | 57 |
| 18 D | 38 | 58 |
| 19 A | 39 | 59 |
| 20 D | 40 | 60 |