Answer Sheet

Q1)

You are in charge of designing a Cloud formation template which deploys a LAMP stack. After deploying a stack . you see that the status of the stack Is showing as CREATE_COMPLETE, but the apache server is still not up and running and is experiencing issues while starting up. You want to ensure that the stack creation only shows the status of CREATE_COMPLETE after all resources defined in the stack are up and running.

How can you achieve this? Choose 2 answers from the options given below.

- ✅ Use the Creation Policy to ensure it is associated with the EC2 Instance resource.
- ⚪ Use lifecycle hooks to mark the completion of the creation and configuration of the underlying resource.
- ✅ Use the CFN helper scripts to signal once the resource configuration is complete.
- ⚪ Define a stack policy which defines that all underlying resources should be up and running before showin, > status of CREATE_COMPLETE.

Q2)

A gaming company adopted AWS Cloud Formation to automate load-testing of their games. They have created an AWS Cloud Formation template for each gaming environment and one for the load-testing stack. The load-testing stack creates an Amazon Relational Database Service (RDS) Postgres database and two web servers running on Amazon Elastic Compute Cloud (EC2) that send HTTP requests, measure response times, and write the results into the database. A test run usually takes between 15 and 30 minutes. Once the tests are done, the AWS Cloud Formation stacks are torn down immediately. The test results written to the Amazon RDS database must remain accessible for visualization and analysis.

Select possible solutions that allow access to the test results after the AWS Cloud Formation load -testing stack is deleted. Choose 2 answers. Please select:

- ✅ Define a deletion policy of type Retain for the Amazon RDS resource to assure that the RDS database Is not deleted with the AWS Cloud Formation stack. ?
- ⚪ Define an Amazon RDS Read-Replica in the load-testing AWS Cloud Formation stack and define a dependency relation between master and replica via the Depends On attribute.
- ⚪ Define an update policy to prevent deletion of the Amazon RDS database after the AWS Cloud Formation stack is deleted.
- ✅ Define a deletion policy of type Snapshot for the Amazon RDS resource to assure that the RDS database can be restored after the AWS Cloud Formation stack is deleted.

Q3)

You were just hired as a Dev Ops Engineer for a startup. Your startup uses AWS for 100% of their infrastructure. They currently have no automation at all for deployment, and they have had many failures while trying to deploy to production. The company has told you deployment process risk mitigation is the most important thing now, and you have a lot of budget for tools and AWS resources. Their stack includes a 2-tier API with data stored in Dynamo DB or 53, depending on type. The Compute layer is EC2 in Auto Scaling Groups. They use Route53 for DNS pointing to an ELB. An ELB balances load across the EC2 instances. The scaling group properly varies between 4 and 12 EC2 servers.

Which of the following approaches, given this company?s stack and their priorities, best meets the company's needs? Please select:

- ⚪ Model the stack in AWS Elastic Beanstalk as a single Application with multiple Environments. Use Elastic Beanstalk's Rolling Deploy option to progressively roll out application code changes when promoting across environments.
- ✅ Model the stack In three templates: Data layer. compute layer, and networking layer. Write stack deployment and integration testing automation following Blue-Green methodologies.
- ⚪ Model the stack in AWS Ops Works as a single Stack, with 1 compute layer and its associated ELB. Use Chef and App Deployments to automate Rolling Deployment.
- ⚪ Model the stack in 1 Cloud Formation template. to ensure consistency and dependency graph resolution. Write deployment and integration testing automation following Rolling Deployment methodologies.

Q4)

You are currently using SQS to pass messages to EC2 Instances. You need to pass messages which are greater than 5 MB in size.

Which of the following can help you accomplish this.

- ✅ Use the Amazon SQS Extended Client Library for Java and Amazon S3 as a storage mechanism for message bodies.
- ⚪ Use Kinesis as a buffer stream for message bodies. Store the checkpoint id for the placement in the Kinesis Stream In SQS.
- ⚪ Use SQSs support for message partitioning and multi-part uploads on Amazon 53.
- ⚪ Use AWS EFS as a shared pool storage medium. Store file system pointers to the files on disk in the SQS message bodies.

Q5)

You work at a company that makes use of AWS resources. One of the key security policies is to ensure that all data is encrypted both at rest and in transit.

Which of the following is not a right implementation which aligns to this policy?

- ✅ Enable SSL termination on the ELB
- ⚪ Enabling Proxy Protocol
- ⚪ Using 53 Server Side Encryption (SSE) to store the information
- ⚪ Enabling sticky sessions on your load balancer

Q6) Which of the following are true with regard to Ops works stack Instances? Choose 3 answers from the options given below?

- [x] You can start and stop instances manually.
- [x] You can use EC2 Instances that were created out side the boundary of Ops work.
- [x] You can use instances running on your own hardware.
- [ ] A stacks instances can be a combination of both Linux and Windows based operating systems

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Q7) TPT Limited has uploaded huge amounts of aerial and satellite image data to 53. Earlier, the following were consider for a successful upload -
1. On-premises environment consisted of dedicated group of servers for data processing.
2. Used Rabbit MQ (open source messaging system for sending job information to the servers).
3. Then the data was stored on tape and was shipped offsite.

TPT Limited wants to continue with that design, and utilize AWS archival storage and messaging services for cost reduction. Which of the following options will help meet the requirement?

- [ ] None of these
- [ ] Use SNS to pass job messages use Cloud Watch alarms to terminate spot worker instances when they become idle. Once data is processed. change the storage class of the S3 object to Glacier.
- [x] Setup Auto-Scaled workers triggered by queue depth that use spot instances to process messages in SQS. Once data is processed, change the storage class of the 53 objects to Glacier
- [ ] Use SQS for passing job messages. Use Cloud Watch alarms to terminate EC2 worker instances when they \. become Idle. Once data is processed, change the storage class of the S3 objects to Reduced Redundancy Storage.
- [ ] Change the storage class of the 53 objects to Reduced Redundancy Storage. Setup AutoScaled workers triggered by queue depth that use spot instances to process messages in SQS. Once data is processed. change the storage class of the 53 objects to Glacier.

Q8)

Your finance supervisor has set a budget of 2000 USD for the resources in AWS.

Which of the following is the simplest way to ensure that you know when this threshold is being reached?

- [x] Use the Cloud watch billing alarm to notify you when you reach the threshold value
- [ ] Use Cloud watch logs to notify you when you reach the threshold value
- [ ] Use Cloud watch events to notify you when you reach the threshold value
- [ ] Use SQS queues to notify you when you reach the threshold value

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Q9) Which of the following will prevent hackers from hijacking your AWS account and ensures security of the AWS account?

- [ ] None of these
- [ ] Use AWS PAM Geo-Lock and disallow anyone from logging in except for in your city.
- [x] Use MFA on all users and accounts, especially on the root account
- [ ] Don't write down or remember the root account password after creating the AWS account
- [ ] Use short but complex password on the root account and any administrators.

Q10)

You need to store a large volume of data. The data needs to be readily accessible for a short period, but the needs to be archived indefinitely after that.

What is a cost-effective solution? Please select:

- [x] Store your data in Amazon S3, and use lifecycle policies to archive to Amazon Glacier
- [ ] Store your data in Amazon S3. and use lifecycle policies to archive to S3-Infrequently Access
- [ ] Store all the data in 53 so that it can be more cost effective
- [ ] Store your data in an EBS volume, and use lifecycle policies to archive to Amazon Glacier.

Q11) Which of the following features of the Auto scaling Group ensures that additional instances are neither launched or terminated before the previous scaling activity takes effect ?

- [x] Cool down period
- [ ] Ramp up period
- [ ] Creation policy
- [ ] Termination policy

Q12) How can you resolve a dependency Error when using Cloud formation? Please select:

- [x] Use the Depends on attribute
- [ ] Use the Error attribute
- [ ] Use the parameter attribute
- [ ] Use the mappings attribute

Q13)

A web-startup runs its very successful social news application on Amazon EC2 with an Elastic Load Balancer, an Auto-Scaling

group of Java/Tomcat application-servers, and Dynamo DB as data store. The main web application best runs on m2 x large Instances since it is highly memory- bound. Each new deployment requires semi-automated creation and testing of a new AMI for the application servers which takes quite a while and is therefore only done once per week. Recently, a new chat feature has been implemented in node js and wails to be integrated in the architecture. First tests show that the new component is CPU bound because the company has some experience with using Chef, they decided to streamline the deployment process and use AWS Ops Works as an application life cycle tool to simplify management of the application > and reduce the deployment cycles.

What configuration in AWS Ops Works is necessary to integrate the nev\ chat module in the most cost-efficient and flexible way?

- ✅ Create one AWS Ops Works stack create two AWS Ops Works layers create one custom recipe
- Create two AWS Ops Works stacks create two AWS Ops Works layers create one custom recipe
- Create two AWS Ops Works stacks create two AWS Ops Works layers create two custom recipe
- Create one AWS Ops Works stack, create one AWS Ops Works layer, create one custom recipe

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Q14)

You are using lifecycle hooks in your Auto Scaling Group. Because there is a lifecycle hook, the instance is put in the Pending: Wait state, which means that it is not available to handle traffic yet. When the Instance enters the wait state, other scaling actions are suspended. After some time, the instance state is changed to Pending: Proceed, and finally In Service where the instances that are part of the Auto scaling Group can start serving up traffic. But you notice that the bootstrapping process on the instances finish much earlier, long before the state is changed to Pending :Proceed.

What can you do to ensure the Instances are placed In the right state after the bootstrapping process Is complete? Please select:

- ✅ Use the complete-lifecycle-action call to complete the lifecycle action. Run this command from the Command line interface.
- Use the complete-lifecycle-action call to complete the lifecycle action. Run this command from another EC2 Instance.
- Use the complete-lifecycle-action call to complete the lifecycle action. Run this command from a SQS queue
- Use the complete-lifecycle-action call to complete the lifecycle action. Run this command from the Simple Notification service.

Q15) What would you set in your Cloud Formation template to fire up different instance sizes based off of environment type?

- ✅ conditions
- Mappings
- Resources
- Outputs

Q16)

You are Dev ops Engineer for a large organization. The company wants to start using Cloud formation templates to start building their resources in AWS. You are getting requirements for the templates from various departments, such as the networking, security, application etc.

What is the best way to architect these Cloud formation templates.

- Consider using Elastic beanstalk to create your environments since Cloud formation is not built for such customization.
- Use a single Cloud formation template, since this would reduce the maintenance overhead on the templates itself.
- Consider using Opsworks to create your environments since Cloud formation is not built for such customization.
- ✅ Create separate logical templates . for example. a separate template for networking, security, application etc. Then nest the relevant templates.

Q17)

Your company has multiple applications running on AWS. Your company wants to develop a tool that notifies on-call teams Immediately via email when an alarm Is triggered in your environment. You have multiple on- call teams that work different shifts, and the tool should handle notifying the correct teams at the correct times.

How should you implement this solution?

- Create an Amazon SNS topic and configure your on-call team email addresses as subscribers. Use the AWS SDK tools to integrate your application with Amazon SNS and send messages to this new topic. Notifications will be sent to on-call users when a Cloud Watch alarm is triggered.
- ✅ Create an Amazon SNS topic for each on-call group, and configure each of these with the team member emails as subscribers. Create another Amazon SNS topic and configure your Cloud Watch alarms to notify this topic when triggered. Create an HTTP subscriber to this topic that notifies your application via HTTP POST when an alarm is triggered. Use the AWS SDK tools to integrate your application with Amazon SNS and send messages to the correct team topic when on shift. ?
- Create an Amazon SNS topic and an Amazon SOS queue. Configure the Amazon SQS queue as a subscriber to the Amazon SNS topic. Configure Cloud Watch alarms to notify this topic when an alarm is triggered. Create an Amazon EC2 Auto Scaling group with both minimum and desired Instances configured to 0. Worker nodes in this group spawn when messages are added to the queue. Workers then use Amazon Simple Email Service to send messages to your on call teams.
- Create an Amazon SNS topic and configure your on-call team email addresses as subscribers. Create a secondary Amazon SNS topic for alarms and configure your Cloud Watch alarms to notify this topic when triggered. Create an HTTP subscriber to this topic that notifies your application via HTTP POST when an alarm is triggered. Use the AWS SDK tools to integrate your application with Amazon SNS and send messages to the first topic so that onc all engineers receive alerts.

Q18)

You use Amazon Cloud Watch as your primary monitoring system for your web application. After a recent software deployment, your users are getting Intermittent 500 Internal Server Errors when using the web application. You want to create a Cloud Watch alarm, and notify an on-call engineer when these occur.

How can you accomplish this using AWS services? Choose three answers from the options given below Please select:

✅ Use Amazon Simple Notification Service to notify an on-call engineer when a Cloud Watch alarm is triggered.
✅ Install a Cloud Watch Logs Agent on your servers to stream web application logs to Cloud Watch.
⚪ Use Amazon Simple Email Service to notify an on-call engineer when a Cloud Watch alarm is triggered.
⚪ Deploy your web application as an AWS Elastic Beanstalk application. Use the default Elastic Beanstalk Cloud watch metrics to capture 500 Internal Server Errors. Set a Cloud Watch alarm on that metric.

Q19)

You have an Auto Scaling group with an Elastic Load Balancer. You decide to suspend the Auto Scaling Add To Load Balancer for a short period of time.

What will happen to the instances launched during the suspension period?

⚪ Auto Scaling will not launch the instances during this period because of the suspension
✅ The instances will not be registered with ELB. You must manually register when the process is resumed .
⚪ The instances will be registered with ELS once the process has resumed
⚪ It is not possible to suspend the Add To Load Balancer process

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Q20)

You currently have the following setup in AWS 1)An Elastic Load Balancer 2) Auto scaling Group which launches EC Instances 3) AMIs with your code pre-installed You want to deploy the updates to your app to only a certain number of users. You want to have a cost-effective solution. You should also be able to revert back quickly.

Which of the below solutions is the most feasible one?

⚪ Create new AMIs with the new app. Then use the new EC2 instances in half proportion to the older instances.
✅ Create a second ELB. Auto Scaling. Create the AMI with the new app. Use a new launch configuration. Use Route 53 Weighted Round Robin records to adjust the proportion of traffic hitting the two ELBs
⚪ Redeploy with AWS Elastic Beanstalk and Elastic Beanstalk versions. Use Route 53 Weighted Round Robin records to adjust the proportion of traffic hitting the two ELB5
⚪ Create a full second stack of instances, cut the DNS over to the new stack of instances, and change the ONS back if a rollback is needed.

Q21)

You have deployed an application to AWS which makes use of Auto scaling to launch new instances. You now want to change the instance type for the new instances.

Which of the following is one of the action items to achieve this deployment?

⚪ Create new EC2 instances with the new instance type and attach it to the Auto scaling Group
⚪ Use Cloud formation to deploy the new application with the new instance type
⚪ Use Elastic Beanstalk to deploy the new application with the new instance type
✅ Create a new launch configuration with the new instance type

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Q22)

You have a code repository that uses Amazon 53 as a data store. During a recent audit of your security controls, some concerns were raised about maintaining the integrity of the data in the Amazon S3 bucket. Another concern was raised around securely deploying code from Amazon S3 to applications running on Amazon EC2 in a virtual private cloud.

What are some measures that you can implement to mitigate these concerns? Choose two answers from the options given below.

✅ Use a configuration management service to deploy AWS Identity and Access Management user credentials to the Amazon EC2 instances. Use these credentials to securely access the Amazon 53 bucket when deploying code.
⚪ Add an Amazon S3 bucket policy with a condition statement to allow access only from Amazon EC2 instances with RFC 1918 P addresses and enable bucket versioning.
⚪ Add an Amazon S3 bucket policy with a condition statement that requires multi-factor authentication in order to delete objects and enable bucket versioning.
⚪ Use AWS Data Pipeline with multi-factor authentication to securely deploy code from the Amazon 53 bucket to your Amazon EC2 instances.

Q23)

You have been tasked with deploying a scalable distributed system using AWS Ops Works. Your distributed system is required to scale on demand. As it is distributed, each node must hold a configuration file that Includes the hostnames of the other Instances within the layer.

How should you configure AWS Ops Works to manage scaling this application dynamically?

⚪ Update this configuration file by writing a script to poll the AWS Ops Works service API for new instances. Configure your base AMI to execute this script on Operating System startup.
⚪ Create a Chef Recipe to update this configuration file, configure your AWS Ops Works stack to use custom cookbooks, and assign this recipe to execute when instances are launched.
✅ Create a Chef Recipe to update this configuration file, configure your AWS Ops Works stack to use custom cookbooks, and assign this recipe to the Configure Lifecycle Event of the specific layer.
⚪ Configure your AWS Ops Works layer to use the AWS-provided recipe for distributed host configuration, and configure the instance hostname and file path parameters in your recipes settings.

Q24)

You have a set of EC2 instances hosted in AWS. You have created a role named Demo Role and assigned that role to a policy, but you are unable to use that role with an instance.

Why is this the case.

- ✅ You need to create an instance profile and associate it with that specific role.
- You won't be able to use that role with an instance unless you also create a user group and associate it with, that specific role.
- You won't be able to use that role with an instance unless you also create a user and associate it with that specific role
- You are not able to associate an IAM role with an instance

Q25)

You have a large number of web servers in an Auto Scaling group behind a load balancer. On an hourly basis, you want to filter and process the logs to collect data on unique visitors, and then put that data in a durable data store in order to run reports. Web servers In the Auto Scaling group are constantly launching and terminating based on your scaling policies, but you do not want to lose any of the log data from these servers during a stop/termination initiated by a user or by Auto Scaling.

What two approaches will meet these requirements? Choose two answers from the options given below?.

- Install an AWS Data Pipeline Logs Agent on every web server during the bootstrap process. Create a log group object In AWS Data Pipeline, and define Metric Filters to move processed log data directly from the web servers to Amazon Red shift and run reports every hour.
- ✅ On the web servers, create a scheduled task that executes a script to rotate and transmit the logs to an Amazon 53 bucket. Ensure that the operating system shutdown procedure triggers a logs transmission when the Amazon EC2 instance is stopped/terminated. Use AWS Data Pipeline to move log data from the Amazon S3 bucket to Amazon Redshift In order to process and run reports every hour.
- ✅ Install an Amazon Cloud watch Logs Agent on every web server during the bootstrap process. Create a Cloud Watch log group and define Metric Filters to create custom metrics that track unique visitors from the streaming web server logs. Create a scheduled task on an Amazon EC2 instance that runs every hour to generate a new report based on the Cloud watch custom metrics.
- On the web servers, create a scheduled task that executes a script to rotate and transmit the logs to Amazon Glacier. Ensure that the operating system shutdown procedure triggers a logs transmission when the Amazon EC2 instance is stopped/terminated. Use Amazon Data Pipeline to process the data in Amazon Glacier and run reports every hour.

Q26)

Your company has developed a web application and is hosting it in an Amazon 53 bucket configured for static website hosting. The application is using the AWS SDK for JavaScript in the browser to access data stored in an Amazon Dynamo DB table.

How can you ensure that API keys for access to your data In Dynamo DB are kept secure?

- Configure 53 bucket tags with your AWS access keys (or your bucket hosing your website so that the application can query them for access.
- ✅ Configure a web identity federation role within IAM to enable access to the correct Dynamo DB resources and retrieve temporary credentials. .,
- Create an Amazon S3 role in IAM with access to the specific Dynamo DB tables, and assign It to the bucket hosting your website.
- Store AWS keys in global variables within your application and configure the application to use these credentials when making requests.

Q27)

As part of your continuous deployment process, your application undergoes an I/O load performance test before It is deployed to production using new AMIs. The application uses one Amazon Elastic Block Store (EBS) PIOPS volume per instance and requires consistent I/O performance.

Which of the following must be carried out to ensure that I/O load performance tests yield the correct results in a repeatable manner?

- ✅ Ensure that the Amazon EBS volumes have been pre-warmed by reading all the blocks before the test.
- Ensure that the i/O block sizes for the test are randomly selected.
- Ensure that the Amazon EBS volume Is encrypted.
- Ensure that snapshots of the Amazon EBS volumes are created as a backup.

Q28)

As an architect you have decided to use Cloud Formation instead of Ops Works or Elastic Beanstalk for deploying the applications in your company. Unfortunately. you have discovered that there is a resource type that Is not supported by Cloud Formation.

What can you do to get around this. Please select:

- Specify the custom resource by separating your template into multiple templates by using nested stacks
- Specify more mappings and separate your template into multiple templates by using nested stacks.
- Use a configuration management tool such as Chef, Puppet. or Ensile.
- ✅ Create a custom resource type using template developer. custom resource template. and Cloud Formation.

Q29)

You work for an insurance company and are responsible for the day-to-day operations of your company's online quote system used to provide insurance quotes to members of the public. Your company wants to use the application logs generated by the system to better understand customer behavior. Industry, regulations also require that you retain all application logs for the system indefinitely in order to investigate fraudulent claims in the future. You have been tasked with designing a log management system with the following requirements: - All log entries must be retained by the system, even during unplanned instance failure, The customer insight team requires immediate access to the logs from the past seven days.

The fraud investigation team requires access to all historic logs, but will wait up to 24 hours before these logs are available.

How would you meet these requirements in a cost-effective manner? Choose three answers from the options below?

✅ Create an Amazon 53 lifecycle configuration to move log files from Amazon 53 to Amazon Glacier after seven days.
✅ Create a housekeeping script that runs on a T2 micro instance managed by an Auto Scaling group for high availability.
⚪ Configure your application to write logs to the Instance's ephemeral disk, because this storage is free and has good write performance. Create a script that moves the logs from the instance to Amazon S3 once an hour.
✅ Configure your application to write logs to a separate Amazon EBS volume with the delete on termination field set to false. Create a script that moves the logs from the instance to Amazon 53 once an hour. -

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Q30)

Your application stores sensitive information on and EBS volume attached to your EC2 instance.

How can you protect your information? Choose two answers from the options given below Please select:

⚪ Copy an unencrypted snapshot of an unencrypted volume, you can encrypt the copy. Volumes restored from this encrypted copy will also be encrypted.
⚪ It Is not possible to encrypt an EBS volume, you must use a lifecycle policy to transfer data to 53 for encryption.
✅ Create and mount a new, encrypted Amazon EBS volume. Move the data to the new volume. Delete the old Amazon EBS volume
⚪ un mount the s volume, take a snapshot and encrypt the snapshot. Re-mount the Amazon EBS volume

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Q31)

Your application is currently running on Amazon EC2 instances behind a load balancer. Your management has decided to use a Blue/Green deployment strategy.

How should you Implement this for each deployment? Please select:

⚪ Using AWS Cloud Formation, create a test stack for validating the code, and then deploy the code to each production Amazon EC2 instance.
✅ Create a new load balancer with new Amazon EC2 instances, carry out the deployment, and then switch DNS over to the new load balancer using Amazon Route 53 after testing.
⚪ Set up Amazon Route 53 health checks to fail over from any Amazon EC2 instance that is currently being deployed to.
⚪ Launch more Amazon EC2 instances to ensure high availability. de-register each Amazon EC2 instance from the load balancer, upgrade it and test it. and then register it again with the load balancer.

Q32)

You currently run your infrastructure on Amazon EC2 instances behind an Auto Scaling group> All logs for your application are currently written to ephemeral storage. Recently your company experienced a major bug in code that made it through testing and was ultimately deployed to your fleet. This bug triggered your Auto Scaling group to scale up and back down before you could successfully retrieve the logs off your server to better assist you in troubleshooting the bug.

Which technique should you use to make sure you are able to review your logs after your Instances have shut down?

⚪ Configure your Auto Scaling policies to create a snapshot of all ephemeral storage on terminate.
⚪ Install the Cloud Watch monitoring agent on your AMI. and set up new SNS alert for Cloud Watch metrics that triggers the Cloud Watch monitoring agent to backup all logs on the ephemeral drive.
✅ Install the Cloud Watch Logs Agent on your AMI, and configure Cloud Watch Logs Agent to stream your logs.
⚪ Configure the ephemeral policies on your Auto Scaling group to back up on terminate.

Q33)

You have been requested to use Cloud Formation to maintain version control and achieve automation for the applications In your organization.

How can you best use Cloud Formation to keep everything agile and maintain multiple environments while keeping cost down?

⚪ Combine all resources into one template for version control and automation.
✅ Create separate templates based on functionality, create nested stacks with Cloud Formation.
⚪ Create multiple templates in one Cloud Formation stack.
⚪ Use Cloud Formation custom resources to handle dependencies between stacks

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Q34)

After a daily scrum with your development teams, you?ve agreed that using Blue/Green style deployments would benefit the team.

Which technique should you use to deliver this new requirement? Please select:

✅ Re-deploy your application behind a load balancer that uses Auto Scaling groups, create a new Identical Auto Scaling group. and associate it to the load balancer. During deployment, set the desired number of instances on the old Auto Scaling group to zero, and when all instances have terminated, delete the old Auto Scaling group.
⚪ Re-deploy your application on AWS Elastic Beanstalk, and take advantage of Elastic Beanstalk deployment types.
⚪ Using an AWS Ops Works stack, re-deploy your application behind an Elastic Load Balancing load balancer and take advantage of Ops Works stack versioning, during deployment create a new version of your application, tell Ops Works to launch the new version behind your load balancer. and when the new version is launched, terminate the old Ops Works stack.
⚪ Using an AWS Cloud Formation template. re-deploy your application behind a load balancer. launch a new AWS Cloud Formation stack during each deployment, update your load balancer to send half your traffic to the ne stack while you test, after verification update the load ba lancer to send 100% of traffic to the new stack, and then terminate the old stack.

Q35)

After reviewing the last quarter?s monthly bills, management has noticed an increase in the overall bill from Amazon. After researching this increase in cost, you discovered that one of your new services Is doing a lot of GET Bucket API calls to Amazon S3 to build a metadata cache of all objects in the applications bucket. Your boss has asked you to come up with a new cost-effective way to help reduce the amount of these new GET Bucket API calls.

What process should you use to help mitigate the cost?

- Upload all files to an Elastic Cache file cache server. Update your application to now read all file metadata from the Elastic Cache file cache server, and configure the Elastic Cache policies to push all files to Amazon 53 for long- term storage.
- Update your Amazon 53 buckets lifecycle policies to automatically push a list of objects to a new bucket. a use this list to view objects associated with the application's bucket.
- Create a new Dynamo DS table. Use the new Dynamo DS table to store all metadata about all objects uploaded to Amazon 53. Any time a new object is uploaded, update the application's internal Amazon 53 object metadata cache from Dynamo DB.
- ✅ Using Amazon SNS. create a notification on any new Amazon 53 objects that automatically updates a new Dynamo DB table to store all metadata about the new object. Subscribe the application to the Amazon SNS topic to update its internal Amazon 53 object metadata cache from the Dynamo DS table.

Q36)

You are using Cloud Formation to launch an EC2 instance and then configure an application after the instance is launched. You need the stack creation of the ELB and Auto Scaling to wait until the EC2 Instance is launched and configured properly.

How do you do this? Please select:

- ✅ Use a Creation Policy to wait for the creation of the other dependent resources
- Use the Wait Condition resource to hold the creation of the other dependent resources
- It is not possible for the stack creation to wait until one service is created and launched
- Use the Hold Condition resource to hold the creation of the other dependent resources

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Q37)

The operations team and the development team want a single place to view both operating system and application logs.

How should you implement this using AWS services? Choose two from the options below

- Using AWS Cloud Formation and configuration management, set up remote logging to send events via UDP packets to Cloud Trail.
- Using AWS Cloud Formation, merge the application logs with the operating system logs, and use IAM Roles to allow both teams to have access to view console output from Amazon EC2.
- ✅ Using configuration management, set up remote logging to send events to Amazon Kinesis and insert the into Amazon Cloud Search or Amazon Red shift. depending on available analytic tools.
- ✅ Using AWS Cloud Formation, create a Cloud Watch Logs Log Group and send the operating system and application logs of interest using the Cloud Watch Logs Agent.

Q38)

You need to monitor specific metrics from your application and send real-time alerts to your Devops Engineer.

Which of the below services will fulfill this requirement? Choose two answers Please select:

- Amazon Simple Email Service
- ✅ Amazon Simple Notification Service
- ✅ Amazon Cloud Watch
- Amazon Simple Queue Service

Q39)

Management has reported an increase in the monthly bill from Amazon web services, and they are extremely concerned with this increased cost. Management has asked you to determine the exact cause of this increase, After reviewing the billing report, you notice an increase In the data transfer cost.

How can you provide management with a better insight into data transfer use?

- Update your Amazon Cloud Watch metrics to use five-second granularity, which will give better detailed metrics that can be combined with your billing data to pinpoint anomalies.
- Use Amazon Cloud Watch Logs to run a map-reduce on your logs to determine high usage and data transfer
- ✅ Deliver custom metrics to Amazon Cloud Watch per application that breaks down application data transfer into multiple. more specific data points.
- Using Amazon Cloud Watch metrics, pull your Elastic Load Balancing outbound data transfer metrics monthly, and include them with your billing report to show which application is causing higher bandwidth usage.

Q40)

You have an application running a specific process that is critical to the application's functionality, and have added the health check process to your Auto Scaling group. The instances are showing healthy but the application Itself is not working as it should.

What could be the issue with the health check, since It is still showing the instances as healthy.

- It is not possible for a health check to monitor a process that involves the application
- You do not have the time range in the health check property configured
- ✓ The health check is not checking the application process
- The health check is not configured properly

Q41) If your application performs operations or workflows that take a long time to complete, what service

- Manages Lambda functions and running a daemon process on each instance
- Manages a Amazon SNS Topic and running a daemon process on each instance
- ✓ Manages a Amazon SQS queue and running a daemon process on each instance
- Manages the ELB and running a daemon process on each instance

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Q42)

You have deployed an Elastic Beanstalk application in a new environment and want to save the current state of your environment in a document. You want to be able to restore your environment to the current state later or possibly create a new environment.

You also want to make sure you have a restore point. How can you achieve this?

- ✓ Saved Configurations
- Configuration Management Templates
- use Cloud Formation templates
- Saved Templates

Q43)

Your development team wants account-level access to production instances in order to do live debugging of a highly secure environment.

Which of the following should you do?

- Place an internally created private key into a secure 53 bucket with server-side encryption using customer keys and configuration management, create a service account on all the instances using this private key, and assi1 IAM users to each developer so they can download the file.
- Place the credentials provided by Amazon EC2 onto an MFA encrypted USB drive, and physically share it with each developer so that the private key never leaves the office.
- Place the credentials provided by Amazon Elastic Compute Cloud (EC2) into a secure Amazon Sample Storage Service (53) bucket with encryption enabled. Assign AWS Identity and Access Management (IAM) users to each developer so they can download the credentials file,
- ✓ Place each developers own public key into a private S3 bucket, use instance profiles and configuration management to create a user account for each developer on all instances, and place the users public keys into the appropriate account. ..-

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Q44) Which of the following Cache Engines does Ops work have built in support for?

- There is no built En support as of yet for any cache engine
- Both Redis and Mem cache
- Redis
- ✓ Mem cache

Q45)

Your company is getting ready to do a major public announcement of a social media site on AWS. The website is running on EC2 instances deployed across multiple Availability Zones with a Multi-AZ RDS My SQL Extra Large DB Instance. The site performs a high number of small reads and writes per second and relies on an eventual consistency model.

After comprehensive tests you discover that there is read contention on RDS My SQL.

Which are the best approaches to meet these requirements? Choose 2 answers from the options below ?

- ✓ Add an RDS My SQL read replica in each availability zone

Explanation:-Implement sharding to distribute load to multiple RDS MySQL instances -- this is only a read contention, the writes work fine. Increase the RDS MySQL Instance size and Implement provisioned IOPS -- it is not scalable, this is only a read contention, the writes work fine.

- Increase the RDS My SQL Instance size and Implement provisioned lops
- Implement shading to distribute load to multiple RDS My SQL instances
- ✓ Deploy Elastic Cache in-memory cache running in each availability zone

Explanation:-Implement sharding to distribute load to multiple RDS MySQL instances -- this is only a read contention, the writes work fine. Increase the RDS MySQL Instance size and Implement provisioned IOPS -- it is not scalable, this is only a read contention, the writes work fine.

Q46)

The company you work for has a huge amount of infrastructure built on AWS. However there has been some concerns recently about the security of this infrastructure, and an external auditor has been given the task of running a thorough check of all of your company's AWS assets. The auditor will be in the USA while your S company's infrastructure resides in the Asia Pacific (Sydney) region on AWS. Initially, he needs to check all of your VPC assets, specifically, security groups and NACLs You have been assigned the task of providing the auditor with a login to be able to do this.

Which of the following would be the best and most secure solution to provide the auditor with so he can begin his Initial investigations? Choose the correct answer from the options below

- Create an IAM user tied to an administrator role. Also provide an additional level of security with MFA.
- ✓ Create an IAM user who will have read-only access to your AWS VPC infrastructure and provide the auditor with those credentials. ...-

- Create an IAM user with full VPC access but set a condition that will not allow him to modify anything if the request is from any IP other than his own.
- Give him root access to your AWS Infrastructure, because he is an auditor he will need access to every service.

Q47)

You have an Ops work stack setup in AWS. You want to install some updates to the Linux instances in the stack.

Which of the following can be used to publish those updates. Choose 2 answers from the options given below

- Delete the stack and create a new stack with the instances and their relevant updates
- ✓ Create and start new instances to replace your current online instances. Then delete the current instances.
- ✓ On Linux-based instances in Chef 11.10 or older stacks, run the Update Dependencies stack command
- Use Auto-scaling to launch new instances and then delete the older instances

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