1. A company has opted to store their cold data on EBS Volumes. Ensuring optimal cost, which of the following would be the ideal EBS Volume type to host this type of data?

A. General Purpose SSD
B. Provisioned IOPS SSD
C. Throughput Optimized HDD
D. Cold HDD

2. You currently have the following architecture in AWS:

a. A couple of EC2 Instances located in us-west-2a

b. The EC2 Instances are launched via an Auto Scaling group.

c. The EC2 Instances sit behind a Classic ELB.

Which of the following additional steps should be taken to ensure the above architecture conforms to a well-architected framework?

A. Convert the Classic ELB to an Application ELB.
B. Add an additional Auto Scaling Group.
C. Add additional EC2 Instances to us-west-2a.
D. Add or spread existing instances across multiple Availability Zones.

3. You have an application hosted on AWS consisting of EC2 Instances launched via an Auto Scaling Group. You notice that the EC2 Instances are not scaling up on demand. What checks can be done to ensure that the scaling occurs as expected?

A. Ensure that the right metrics are being used to trigger the scale out.
B. Ensure that ELB health checks are being used.
C. Ensure that the instances are placed across multiple Availability Zones.
D. Ensure that the instances are placed across multiple regions.

4. Your company has a set of EC2 Instances hosted in AWS. There is a mandate to prepare for disasters and come up with the necessary disaster recovery procedures. Which of the following would help in mitigating the effects of a disaster for the EC2 Instances?

A. Place an ELB in front of the EC2 Instances.
B. Use Auto Scaling to ensure the minimum number of instances are always running.
C. Use CloudFront in front of the EC2 Instances.
D. Use AMIs to recreate the EC2 Instances in another region.

5. A solution Architect is designing a multi container –based web application. Parts of the web application,/orders and /sale –event, must scale independently while maintain a single fully qualified Domain name.

Which AWS services will help the Architect build this platform ? (select two)

A. Amazon ELB application load balancer.
B. Amazon ELB classic load balancer.
C. Amazon EC2 container service.
D. Amazon DynamoDB.
E. Amazon SQS

6. A solutions Architect is designing a service that must have four Amazon EC2 instances running between 8AM and 6PM daily. The service requires one EC2 instance outside of those hours.

What is the most cost –effective way to provide enough compute?

A. Use one Amazon EC2 reserved instance and use an auto sailing group to add and remove EC2 instances based on CPU utilization.
B. Use one Amazon EC2 on –demand instance and use an auto scaling group to add and remove EC2 instances based on CPU utilization.
C. Use one Amazon EC2 on –demand instance and use an auto scaling group scheduled action to add three EC2 spot instances at 7:30AM and remove three instances at 6:10PM.
D. Use one Amazon EC2 reserved instance and use an auto sailing group scheduled action to add three EC2 spot instances at 7:30AM and remove three instances at 6:10PM.

7. A solutions Architect is developing a new web application on AWS. The services must scale to support an increasing load. The architect wants to focus on software development and deploying new features rather than provisioning or managning servers.

Which AWS service is appropriate?

A. Auto scaling.
B. Elastic beanstalk.
C. EC2 container service.
D. Cloud formation

8. A company has many applications on Amazon EC2 instances running in auto scaling groups. Company policies require that data on the attached Amazon EBS solutions must be retained.

Which action will meet this requirement without impacting performance?

A. Enable termination protection on the Amazon EC2 instances.
B. Disable delete on termination for the Amazon EBS volumes.
C. Use Amazon EC2 user data to setup a synchronization job for root volume data.
D. Change the auto scaling health check to point to a source on the root volume.

9. A solutions architect is designing an application that uses Amazon EBS volumes. The volumes must be backeup to a different region.

How should the architect meet this requirement?

A. Create EBS snapshot directly from one region to another.
B. Move the data to an Amazon S3 bucked and enable cross-region replication.
C. Create EBS snapshots and then copy them to the designed region.
D. Use a script to copy data from the current Amazon EBS volume to the destination Amazon EBS volume.

10. An environment has an Auto Scaling group across two Availability Zones referred to as AZ-a and AZ-b and a default termination policy. AZ-a has four Amazon EC2 instances, and AZ-b has three EC2 instances. None of the instances is protected from a scale-in

How will Auto Scaling proceed if there is a scale-in event?

A. Auto Scaling selects an instance to terminate randomly
B. Auto Scaling terminates the instance with the oldest launch configuration of all instance
C. Auto Scaling selects the Availability Zone with four EC2 instances and then continues to evaluate
D. Auto Scaling terminates the instances with the closest next billing hour of all instances

11. An application that runs on an Amazon EC2 instance must make secure calls to Amazon S3 buckets

Which steps can s Solutions Architect take to ensure that the calls are made without exposing credentials?

A. Generate an Access key ID and a Secret key and assign an IAM role with least privilege
B. Create an IAM policy granting access to all services and assign it to the Amazon EC2 instance profile
C. Create an IAM role granting least privilege and assign it to the Amazon EC2 instance profile
D. Generate temporary access keys to grant users temporary access to the Amazon EC2 instance

12. Which requirements must be met in order for a solutions Architect to specify that an Amazon EC2 instance should stop rather than terminate when its spot instance is interrupted? (Select TWO)

A. The Spot instance request type must be one-time
B. The Spot instance request type must be persistent
C. The root volume must be an Amazon EBS volume
D. The root volume must be an instance store volume
E. The launch configuration is changed

13. A workload in an Amazon VPC consists of an Elastic Load Balancer that distributes incoming requests across a fleet of six Amazon EC2 instances. Each EC2instances stores and retrieves data from an Amazon DynamoDB table.

Which of the following provisions will ensure that this workload is highly available?

A. Provision DynamoDB tables across a minimum of two Availability Zones.
B. Provision the EC2 instances evenly across a minimum of two Availability Zones in two regions
C. Provision the EC2 instances evenly across a minimum of two Availability Zones in single regions
D. Provision the Elastic Load Balancer to distribute connections across multiple Availability Zones

14. An AWS workload in a VPC is running a legacy database on an Amazon EC2 instance Data is stored on a 200GB Amazon EBS (gp2) volume. At peak load times, logs show excessive wait time

What solution should be implemented to improve to improve database performance using persistent store?

A. Migrate the data on the Amazon EBS volume toan SSD backed volume
B. Change the EC2 instance type to one with EC2 instance store volumes
C. Migrate the data on the EBS volume to provisioned IOPS SSD(io1)
D. Change the EC2 instance type to one with burstable performance

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16. A SysOps admin is responsible for legacy, CPU heavy application. The application can only be scaled vertically. Currently the application is deployed on single large t2.large ec2 instance. The system is shpwing 90% CPU usage and significant performance latency after a few minutes.

What change should be made to alleviate the performance problem?

A. Change the EBS volume to Provisioned IOPS.
B. Upgrade to a Compute-Optimized instance.
C. Add additional t2.large instance to application.
D. Purchase reserved instances.

17. Employees from several companies use an application once a year during a specific 30 day period. The periods are different for each company. Traffic to the application spikes during these 30-day periods

How can the application be designed to handle these traffic spikes?

A. Use an Amazon Route 53 latency routing policy to route traffic to an amazon EC2 instance with the least lag time.
B. Use Amazon S3 to cache static elements of the website requests
C. Use an Auto Scaling group to scale the number of EC2 instances to match the site traffic
D. Use Amazon CloudFront to serve static assets to decrease the load on the EC2 instances

18Q. A local agency plans to deploy 500 Rasberry Pi devices across city. All devices need to be managed and that configuration need to be consistent.

What is the BEST service for managing these devices?

A. AWS Config
B. AWS Systems manager
C. Amazon inspector
D. AWS Service Catalog

19. A Company has asked the Solutions Architect to modify its AWS hosted internal application to allow for load balancing. The customer requests always come from the comoany doman (example net). The company requires that incoming HTTP and HTTPS traffic is routed based on the path element of the URL in the request.

Which implementation can satisfy all requirements?

A. Configure a network Load Balancer with listeners for appropriate path patterns for the target groups.
B. Configure an application Load Balancer with host-based routing based on the domain field in the HTTP header
C.) Configure a network Load Balancer and enable cross-zone load balancing to ensure that all ec2 instances are used
D. Configure an application Load Balancer with listeners for appropriate path patterns for the target groups.

20. A Company's new web application running on Amazon EC2 across multiple Availability Zones (AZs) will be heavily accessed during regular business hours after business hours, usage will be minimal.

What fleet-scaling approach should be used to size the EC2 fleet to handle the traffic demands?

A. Manual scaling across all Azs
B. Provisioning for peak traffic
C. Scheduled scaling
D. Programmatic termination of all instances in one AZ during off peak hours.

21. A web application on ec2 instance behind an ELB application load balancer. The instances run in an ec2 auto scaling group across multiple AZs. Route53 is used for DNS and point to the load balancer. A Solutions Architect has launched a new ASG with a new version of the application, and wants to gradually shift traffic to the new version.

How can this be accomplished?

A. Create an ASG tracking scaling policy to gradually move traffic from old to new version.
B. Change the Application to a Network ELB, then add both ASG as target.
C. Use Route53 weighted routing policy to gradually move traffic from old to new.
D. Deploy Redshift and gradually move traffic to new version from old version.

https://github.com/aws-samples/aws-codepipeline-s3-codedeploy-linux