1. Every user you create in the IAM system starts with \_\_\_\_\_\_\_\_\_.
2. Partial permissions
3. Full permissions
4. **No permissions**
5. While creating an Amazon RDS DB, your first task is to set up a DB \_\_\_\_\_\_ that controls  
   what IP addresses or EC2 instances have access to your DB Instance.
6. Security Pool
7. Secure Zone
8. Security Token Pool
9. **Security Group**
10. Fill in the blanks: Resources that are created in AWS are identified by a unique identifier  
    called an ----------------
11. Amazon Resource Number
12. Amazon Resource Nametag
13. **Amazon Resource Name**
14. Amazon Reesource Namespace
15. What does RRS stand for when talking about S3?
16. Redundancy Removal System
17. Relational Rights Storage
18. Regional Rights Standard
19. **Reduced Redundancy Storage**
20. An instance is launched into the public subnet of your VPC. Which of the following must be done in order for it to be accessible FROM the Internet?
21. Attach an Elastic IP to the instance
22. **Nothing. The instance is accessible from the Internet**
23. Launch a NAT instance and route all traffic to it
24. Make an entry in the route table passing all traffic going outside the VPC to the NAT instance
25. In VPCs with private and public subnets, database servers should ideally be launched into:
26. The public subnet
27. **The private subnet**
28. Either of them
29. Not recommended, they should ideally be launched outside VPC
30. Which of the following can be used as an origin server in CloudFront?(Choose 3)
31. **A webserver running on EC2**
32. **A webserver running in your own datacenter**
33. A RDS instance
34. **An Amazon S3 bucket**
35. What happens to the data on an instance if the instance reboots (intentionally or unintentionally)?
36. Data will be lost
37. **Data persists**
38. Data may persist however cannot be sure
39. You have a web application running on six Amazon EC2 instances, consuming about 45% of resources on each instance. You are using auto-scaling to make sure that six instances are running at all times. The number of requests this application processes is consistent and does not experience spikes. The application is critical to your business and you want high availability at all times. You want the load to be distributed evenly between all instances. You also want to use the same Amazon Machine Image (AMI) for all instances. Which of the following architectural choices should you make?
40. Deploy 6 EC2 instances in one availability zone and use Amazon Elastic Load Balancer.
41. Deploy 3 EC2 instances in one region and 3 in another region and use Amazon Elastic Load Balancer.
42. **Deploy 3 EC2 instances in one availability zone and 3 in another availability zone and use Amazon Elastic Load Balancer.**
43. Deploy 2 EC2 instances in three regions and use Amazon Elastic Load Balancer.
44. What are characteristics of Amazon S3? Choose 2 answers
45. S3 allows you to store objects of virtually unlimited size.
46. S3 offers Provisioned IOPS.
47. **S3 allows you to store unlimited amounts of data.**
48. S3 should be used to host a relational database.
49. **Objects are directly accessible via a URL.**
50. All Amazon EC2 instances are assigned two IP addresses at launch, out of which one can only be reached from within the Amazon EC2 network?
51. Multiple IP address
52. Public IP address
53. **Private IP address**
54. Elastic IP Address
55. Is an edge location in AWS the same as a region?
56. True
57. **False**
58. What action is required to establish a VPC VPN connection between an on-premises data center and an  
    Amazon VPC virtual private gateway?
59. Modify the main route table to allow traffic to a network address translation instance.
60. Use a dedicated network address translation instance in the public subnet.
61. **Assign a static Internet-routable IP address to an Amazon VPC customer gateway.**
62. Establish a dedicated networking connection using AWS Direct Connect.
63. You have been tasked with creating a VPC network topology for your company. The VPC network must support both Internet-facing applications and internally-facing applications accessed only over VPN. Both Internet-facing and internally-facing applications must be able to leverage at least three AZs for high availability. At a minimum, how many subnets must you create within your VPC to accommodate these requirements?
64. 2
65. 3
66. 4
67. **6**
68. which of the following are required elements of an auto scaling group

A. Minimum Size

B. Health checks

C. Desired capacity

D. **Launch configuration**

1. You have created an Elastic Load load balancer listening on port 80, and you registered it with a single Amazon Elastic compute cloud (Amazon EC2) Instance also listening on port 80. A client makes a request to the load balancer with the correct protocol and port for the load balancer. In this scenario, how many connections does the balancer maintain?

A. 1

**B. 2**

C. 3

D. 4

1. How long does Amazon CloudWatch keep metric data?

A. 1 day

B. 2 days

C. 1 week

**D. 2 weeks**

1. Which of the following are the minimum required elements to create an Auto Scaling launch configuration?
2. Launch configuration name, Amazon Machine Image (AMI), and instance type
3. Launch configuration name, Amazon Machine Image (AMI), and instance type & key pair
4. **Launch configuration name, Amazon Machine Image (AMI), and instance type, key pair & security group**
5. Launch configuration name, Amazon Machine Image (AMI), and instance type, key pair, security group & block device mapping
6. Elastic Load. Balancing allows you to distribute traffic across which of the following?
7. Only within a single Availability Zone
8. **Multiple Availability Zones within a region**
9. Multiple Availability Zones within and between regions
10. Multiple Availability Zones within and between regions and on-premises virtualized instances running Open Stack
11. Amazon. CloudWatch offers which types of monitoring plans? (Choose 2 answers)
12. **Basic**
13. **Detailed**
14. Diagnostic
15. Precognitive
16. What is the data processing engine behind Amazon Elastic MapReduce (Amazon EMR)?
17. **Apache Hadoop**
18. Apache Hive
19. Apache pig
20. Apache HBase
21. What Amazon Relational Database Service (Amazon RDS) feature provides the high avail­ability for your database?
22. Regular maintenance windows
23. Security groups
24. Automated backups
25. **Multi-AZ deployment**
26. What administrative tasks are handled by AWS for Amazon Relational Database Service (Amazon RDS) databases? (Choose 3 answers)
27. **Regular backups of the database**
28. Deploying virtual infrastructure
29. Deploying the schema (for example, tables and stored procedures)
30. Patching the operating system and database software
31. Setting up non-admin database accounts and privileges
32. Which port number is used to serve requests by DNS?
33. 22
34. **53**
35. 161
36. 389
37. Which of the following are not appropriates use cases for Amazon Simple Storage Service (Amazon S3)?
38. Storing web content
39. Storing a file system mounted to an Amazon Elastic Compute Cloud (Amazon EC2) instance
40. Storing backups for a relational database
41. **Primary storage for a database**
42. Storing logs for analytics
43. Which of the following databases is not supported on Arnazon RDS?

A. MSSOL

B. MySOL

C. Aurora

**D. DB2**

1. How many relational database engines does RDS currently support?

A. Three: MySQL, Oracle and Microsoft SQL Server.

B. Just two: MySQL and Oracle.

**C. Six: Amazon Aurora, Oracle, Microsoft SQL Server, PostgreSQL, MySQL and MariaDB.**

D. Just one: MySQL.

1. How can an EBS volume which is currently attached to an EC2 instance in one Availability Zone to another?

A. Detach the volume and attach to an EC2 instance in another AZ.

B. Create a new volume in the other AZ and speciW the current volume as the source.

**C. Create a snapshot of the volume and then create a volume from the snapshot in the other AZ**

D. Create a new volume in the AZ and do a disk copy of contents from one volume to another.

1. Which of the following is a durable key-value store?

**A. Amazon Simple Storage Service**

B. Amazon Simple Workflow Service

C. Amazon Simple Queue Service

D. Amazon Simple Notification Service

1. After creating a new AWS account, you use the API to request 40 on-demand EC2 instances in a single AZ.  
   After 20 successful requests, subsequent requests failed. What could be a reason for this issue, and how  
   would you resolve it?

**A. You encountered a soft limit of 20 instances per region. Submit the limit increase form and retry the failed requests once approved.**

B. AWS allows you to provision no more than 20 instances per Availability Zone. Select a different Availability Zone and retry the failed request.

C. You need to use Amazon Virtual Private Cloud (VPC) in order to provision more than 20 instances in a single Availability Zone. Simply terminate the resources already provisioned and re-launch them all in a VPC.

D. You encountered an API throttling situation and should try the failed requests using an exponential decay retry algorithm.

1. How can software determine the public and private IP addresses of the EC2 instance that it is running on?

**A. Query the local instance metadata.**

B. Query the local instance userdata.

C. Query the appropriate Amazon CloudWatch metric.

D. Use an ipconfig or ifconfig command.

1. In reviewing the Auto Scaling events for your application you notice that your application is scaling up and down multiple times in the same hour. What design choice could you make to optimize for cost while preserving elasticity?

A. Modify the Auto Scaling policy to use scheduled scaling actions

B. Modify the Auto Scaling group termination policy to terminate the oldest instance first.

**C. Modify the Auto Scaling group cool-down timers.**

**D. Modify the Amazon CloudWatch alarm period that triggers your Auto Scaling scale down policy.**

E. Modify the Auto Scaling group termination policy to terminate the newest instance first.

1. You receive a Spot Instance at a bid of $0.05/hr. After 30 minutes, the Spot Price increases to $0.06/hr and your Spot Instance is terminated by AWS. What was the total EC2 compute cost of running your Spot Instance?

A**. $0.00**

B. $0.02

C. $0.03

D. $0.05

E. $0.06

1. You have a business-critical two-tier web app currently deployed in two AZs in a single region, using Elastic Load Balancing and Auto Scaling. The app depends on synchronous replication (very low latency connectivity) at the database layer. The application needs to remain fully available even if one application AZ goes off-line, and Auto Scaling cannot launch new instances in the remaining Availability Zones. How can the current architecture be enhanced to ensure this?

A. Deploy in two regions using Weighted Round Robin (WRR), with Auto Scaling minimums set for 50 percent peak load per Region.

B. Deploy in two regions using Weighted Round Robin (WRR), with Auto Scaling minimums set for 100 percent peak load per region.

**C. Deploy in three Availability Zones, with Auto Scaling minimum set to handle 50 percent peak load per zone.**

D. Deploy in three Availability Zones, with Auto Scaling minimum set to handle 33 percent peak load per zone.

1. Amazon Glacier is designed for: (Choose 2 answers)

A. active database storage.

**B. infrequently accessed data.**

**C. data archives.**

D. frequently accessed data.

E. cached session data

1. New database versions will automatically be applied to AWS RDS instances as they become available.

A. True

**B. False**

1. Does AWS allow for the use of Multi Factor Authentication tokens?

**A. Yes, with both hardware and virtual MFA devices**

B. Yes, but only virtual MFA devices.

C. Yes, but only physical (hardware) MFA devices.

D. No

1. You are a solutions architect working for a company that specializes in ingesting large data feeds (using Kinesis) and then analyzing these feeds using Elastic Map Reduce (EMR). The results are then stored on a custom MySQL database which is hosted on an EC2 instance which has 3 volumes, the root/boot volume, and then 2 additional volumes which are striped in to a RAID 1. Your company recently had an outage and lost some key data and have since decided that they will need to run nightly back ups. Your application is only used during office hours, so you can afford to have some down time in the middle of the night if required. You decide to take a snapshot of all three volumes every 24 hours. In what manner should you do this?

A. Take a snapshot of each volume independently, while the EC2 instance is running.

B. **Stop the EC2 instance and take a snapshot of each EC2 instance independently. Once the snapshots are complete, start the EC2 instance and ensure that all relevant volumes are remounted.**

C. Add two additional volumes to the existing RAID 0 volume and mirror these volumes creating a RAID 10. Take a snap of only the two new volumes.

D. Create a read replica of the existing EC2 instance and then take your snapshots from the read replica and not the live EC2 instance.

1. In Identity and Access Management, when you first create a new user, certain security credentials are  
   automatically generated. Which of the below are valid security credentials?

A. Access Key ID, Authorized Key

B. Private Key, Secret Access Key

C. Private Key, Authorized Key

**D. Access Key ID, Secret Access Key**

1. Amazon Web Services offer 3 different levels of support, which of the below are valid support levels.

A. Corporate, Business, Developer

**B. Enterprise, Business, Developer**

C. Enterprise, Business, Free Tier

D. Enterprise, Company, Free Tier

1. You work for a market analysis firm who are designing a new environment. They will ingest large amounts of market data via Kinesis and then analyze this data using Elastic Map Reduce. The data is then imported in to a high performance NoSQL Cassandra database which will run on EC2 and then be accessed by traders from around the world. The database volume itself will sit on 2 EBS volumes that will be grouped into a RAID 0 volume. They are expecting very high demand during peak times, with an IOPS performance level of approximately 15,000. Which EBS volume should you recommend?

A. Magnetic

B. General Purpose SSD

**C. Provisioned IOPS (PIOPS)**

D. Turbo IOPS (TIOPS)

1. You are appointed as your company’s Chief Security Officer and you want to be able to track all changes made to your AWS environment, by all users and at all times, in all regions. What AWS service should you use to achieve this?

A. CloudAudit

B. CloudWatch

**C. CloudTrail**

D. CloudDetective

1. You can have 1 subnet stretched across multiple availability zones.

A. True

**B. False**

1. Amazon S3 provides

A. Unlimited File Size for Objects

**B. Unlimited Storage**

C. A great place to run a No SQL database from

D. The ability to act as a web server for dynamic content (i.e. can query a database)

1. Disabling automated backups disables the point-in-time recovery feature.

**A. True**

B. False

1. Which route must be added to your routing table in order to allow connections to the Internet from your subnet?

**A. Destination: 0.0.0.0/0 –> Target: your Internet gateway**

B. Destination: 192.168.1.257/0 –> Target: your Internet gatewayC. Destination: 0.0.0.0/33 –> Target: your virtual private gateway

D. Destination: 0.0.0.0/0 –> Target: 0.0.0.0/24

E. Destination: 10.0.0.0/32 –> Target: your virtual private gateway

1. A startup company hired you to help them build a mobile application that will ultimately store billions of images and videos in S3. The company is lean on funding, and wants to minimize operational costs, however, they have an aggressive marketing plan, and expect to double their current installation base every six months. Due to the nature of their business, they are expecting sudden and large increases in traffic to and from S3, and need to ensure that it can handle the performance needs of their application. What other information must you gather from this customer in order to determine whether S3 is the right option?

A. You must know how many customers the company has today, because this is critical in understanding what their customer base will be in two years.

**B. You must find out the total number of requests per second at peak usage.**

C. You must know the size of the individual objects being written to S3, in order to properly design the key namespace.

D. In order to build the key namespace correctly, you must understand the total amount of storage needs for each S3 bucket.

1. A company is hosting EC2 instances which focuses on work-loads are on non-production and non-priority batch loads. Also these processes can be interrupted at any time.  
   What is the best pricing model which can be used for EC2 instances in this case?
2. Reserved Instances
3. On-Demand Instances
4. **Spot Instances**
5. Regular Instances
6. A custorner has a requirement to extend their on-premises data center to AWS. The custorner requires a 50-Mbps dedicated and private connection to their VPC.  
   Which AWS product or feature satisfies this requirernent?
7. Arnazon VPC
8. Elastic IP Addresses
9. **AWS Direct Connect**
10. Amazon VPC virtual private gateway
11. You are a solutions architect working for a large oil and gas company. Your company runs their production environment on AWS and has a custom VPC. The VPC contains 3 subnets, 1 of which is public and the other 2 are private. Inside the public subnet is a fleet of EC2 instances which are the result of an autoscaling group. All EC2 instances are in the same security group. Your company has created a new custom application which connects to mobile devices using a custom port. This application has been rolled out to production and you need to open this port globally to the internet. What steps should you take to do this, and how quickly will the change occur

A. Open the port on the existing network Access Control List. Your EC2 instances will be able to communicate   
on this port after a reboot.

B. Open the port on the existing network Access Control List. Your EC2 instances will be able to communicate   
over this port immediately.

**C. Open the port on the existing security group. Your EC2 instances will be able to communicate over this port**   
immediately.

D. Open the port on the existing security group. Your EC2 instances will be able to communicate over this port as soon as the relevant Time To Live (TTL) expires.

1. Amazon S3 buckets in the US Standard region do not provide eventual consistency.

A. True

**B. False**

1. You are a systems administrator and you need to monitor the health of your production environment. You decide to do this using Cloud Watch, however you notice that you cannot see the health of every important metric in the default dash board. Which of the following metrics do you need to design a custom cloud watch metric for, when monitoring the health of your EC2 instances?
2. CPU Usage
3. **Memory usage**
4. Disk read operations
5. Network in
6. Estimated charges
7. Which of the following best describes the use cases for Glacier?

**A. Infrequently accessed data & data archives**

B. Hosting active databases

C. Replicating Files across multiple availability zones and regions

D. Frequently Accessed Data

1. Amazon rds provides a facility to modify the back-up retention policy for automated backups, with a value of 0 indicating for no backup retention. What is the maximum retention period allowed in days?

A. 45

**B. 35**

C. 15

D. 10

1. What is the default per account limit of Elastic IPs?
2. 1
3. 3
4. **5**
5. 0