**Quiz 1**

**\*Question 1:\***  
\*You have a client who is considering moving to AWS services and do not yet have an account. What is the first thing the company should do to set up an AWS Account?\*  
a- Set up an account using CloudSearch  
b- Set up an account using their company email address  
c- Set up an account via SQS(Simple Queue Service)  
d- Set up an account via SNS(Simple Notification Service)

**\*Question 2:\***  
\*Which statement best describes IAM\*  
a- IAM allows you to manage users, groups, roles and their corresponding level of access to AWS platform.  
b- IAM allows you to manage users passwords only. AWS staff must create new users for your organisation. This is done by raising a ticket  
c- IAM allows you to manage permissions for AWS resources only.  
d- IAM stands for Improved Application MAnagement and it allows you to deploy and manage applications in the AWS Cloud

**\*Question 3:\***  
\*One of your users is trying to upload a 7.5GB file to S3 however they keep getting the following error message - "Your proposed upload exceeds the maximum allowed object size.". What is a possible solution for this?\*a- Design your application to use multi-part upload for all objects  
b- Design your application to use large object upload API for this object  
c- Raise a ticket with AWS to increase your maximum object size  
d- Log in to the s3 console, click on the bucket and then click properties. You then increase your maximum object size to 1TB

**\*Question 4:\***  
\*What is an additional way to secure the AWS accounts of both the root account and new users alike?\*  
a- implement MFA for all account  
b- Store the access key id and secret access key of all users in a publicly accessible plain text document on s3 of which only you and members of your organization know the address to.  
c- Configure the AWS Console so that you can only log in to it from a specific IP Address range  
d- Configure the AWS Console so that you can only log in to it from your internal network IP address range

**\*Question 5:\***  
\*In what language are policy documents written ?\*  
a- Python  
b- JSON  
c- Node.js  
d- Java

**\*Question 6:\***  
Amazon S3 is which type of storage service?  
a- Object  
b- Block  
c- Simple  
d- Secure

\***Question 7:\***  
Which AWS storage service assists S3 with transferring data?  
a- CloudFront  
b- AWS Import/Export  
c- DynamoDB  
d- ElastiCache

**\*Question 8:\***  
Amazon S3 offers encryption services for which types of data? choose two  
a- data in flight  
b- data at relax  
c- data at rest  
d- data in motion

**\*Question 9:\***  
You're trying to upload a 25 GB file on S3 and it's not working  
a- The file size limit on s3 is 5GB  
b- The S3 service must be down  
c-You should use Multi Part upload when your file is bigger than 5GB

**\*Question 10:\***  
I tried creating an S3 bucket named "dev" but it didn't work. This is a new AWS Account and I have no buckets at all. What is the cause?  
a- I'm missing IAM permissions to create a bucket  
b- Bucket names must be globally unique and "dev" is already taken

**\*Question 11:\***  
You've added files in your bucket and then enabled versioning. The files you've already added will have which version?  
a- 1  
b- deli  
c- 0  
d- null

**\*Question 12:\***  
Your client wants to make sure the encryption is happening in S3, but wants to fully manage the encryption keys and never store them in AWS. You recommend  
a- SSE-S3  
b- SSE-KMS  
c- SSE-C  
d- Client Side Encryption

**\*Question 13:\***  
Your company wants data to be encrypted in S3, and maintain control of the rotation policy for the encryption keys, but not know the encryption keys values. You recommend  
a- SSE-S3  
b- SSE-KMS  
c- SSE-C  
d- Client Side Encryption

**\*Question 14:\***  
Your company does not trust S3 for encryption and wants it to happen on the application. You recommend  
a- SSE-S3  
b- SSE-KMS  
c- SSE-C  
d- Client Side Encryption

**\*Question 15:\***  
The bucket policy allows our users to read/write files in the bucket, yet we were not able to perform a PutObject API call.  
a- The bucket policy must be wrong  
b- The IAM User must have an explicit DENY in the attached IAM policy  
c- You need to contact AWS Support to lift this limit

**\*Question 16:\***  
You have a website that loads files from another S3 bucket. When you try the URL of the files directly in your Chrome browser it works, but when the website you're visiting tries to load these files it doesn't. What's the problem?  
a- The Bucket policy is wrong  
b- The IAM policy is wrong  
c- CORS is wrong  
d- Encryption is wrong

**Quiz 2**

**\*Question 1:\***  
\*When creating a new security group, all inbound traffic is allowed by default.\*  
a- True  
b- False**\***

**Question 2:\***  
\*Can a placement group be deployed across multiple Availability Zones.\*  
a- Yes  
b- No  
c- Only in Us-East-1  
d- Yes, but only using the AWS API

**\*Question 3:\***  
\*To help you manage your Amazon EC2 instances, you can assign your own metadata in the form of \_\_\_\_\_\_\_\_.\*  
a- Wildcards  
b- Certificates  
c- Tags  
d- Notes

**\*Question 4:\***  
\*In order to enable encryption at rest using EC2 and Elastic Block Store, you must \_\_\_\_\_\_\_\_.\*  
a- Configure encryption when creating the EBS volume  
b- Configure encryption using the appropriate Operating Systems file system  
c- Configure encryption using X.509 certificates  
d- Mount the EBS volume in to S3 and then encrypt the bucket using bucket policy

**\*Question 5:\***  
\*Can I move a reserved instance from one region to another?\*  
a- Yes  
b- No  
c- It depends on the region  
d- Only in the US

**\*Question 6:\***  
\*You need to know both the private IP address and public IP address of your EC2 instance. You should \_\_\_\_\_\_\_\_.\*  
a- Run IPCONFIG(Windows) or IFCONFIG(Linux)  
b- Retrieve the instance Metadata from [http://169.254.169.254/latest/meta-data/](https://slack-redir.net/link?url=http%3A%2F%2F169.254.169.254%2Flatest%2Fmeta-data%2F&v=3)  
c- Retrieve the instance User Data from [http://169.254.169.254/latest/meta-data/](https://slack-redir.net/link?url=http%3A%2F%2F169.254.169.254%2Flatest%2Fmeta-data%2F&v=3)  
d- Use the following command : AWS EC@ DisplayIP

**\*Question 7:\***  
\*If an Amazon EBS volume is an additional partition (not the root volume), can I detach it without stopping the instance?\*  
a- Yes, Although it make take some time.  
b- No, you will need to stop the instance

**\*Question 8:\***  
\*Do Amazon EBS volumes persist independently from the life of an Amazon EC2 instance, for example, if I terminated an EC2 instance, would that EBS volume remain?\*  
a- Yes  
b- No  
c- Only if instructed to when created (Using either the CLI or the AWS console)  
d- it depends on the region in which EC2 instance is provisioned

**\*Question 9:\***  
\*Can you attach an EBS volume to more than one EC2 instance at the same time?\*  
a- Yes  
b- No  
c- If that EC2 Volume is part of an AMI  
c- Depends on the region

**\*Question 10:\***  
\*What is AWS Storage Gateway?\*  
a- It's an on-premise virtual appliance that can be used to cache s3 locally at a customers sites.  
b- It allows large scale import/exports in the AWS cloud without the use of an internet connection  
c- It allows a direct MPLS connection in to AWS  
d- None of the above

**\*Question 11:\***  
\*Individual instances are provisioned in \_\_\_\_\_\_\_\_.\*  
a- Region  
b- Availability zone  
c- Globally

**\*Question 12:\***  
\*You have developed a new web application in the US-West-2 Region that requires six Amazon Elastic Compute Cloud (EC2) instances to be running at all times. US-West-2 comprises three Availability Zones (us-west-2a, us-west-2b, and us-west-2c). You need 100 percent fault tolerance: should any single Availability Zone in us-west-2 become unavailable, the application must continue to run. How would you make sure 6 servers are ALWAYS available? NOTE: each answer has 2 possible deployment configurations. Select the answer that gives TWO satisfactory solutions to this scenario.\*  
a- Solution 1: us-west-2a with two EC2 instances, us-west-2b with two EC2 instances, and us-west-2c with two EC2 instances. Solution 2: us-west-2a with six EC2 instances, us-west-2b with six EC2 instances, and us-west-2c with no EC2 instances.  
b- Solution 1: us-west-2a with six EC2 instances, us-west-2b with six EC2 instances, and us-west-2c with no EC2 instances. Solution 2: us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with three EC2 instances.  
c- Solution 1: us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with no EC2 instances. Solution 2: us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with three EC2 instances.  
d- Solution 1: us-west-2a with three EC2 instances, us-west-2b with three EC2 instances, and us-west-2c with three EC2 instances. Solution 2: us-west-2a with four EC2 instances, us-west-2b with two EC2 instances, and us-west-2c with two EC2 instances.

**\*Question 13:\***  
\*EBS Snapshots are backed up to S3 in what manner?\*  
a- Incrementally  
b- Exponentially  
c- Decreasingly  
d- EBS Snapshots are not stored on s3

**\*Question 14:\***  
\*I can change the permissions to a role, even if that role is already assigned to an existing EC2 instance, and these changes will take effect immediately.\*  
a- True  
b- False**\***

**Question 15:\***  
\*Company salespeople upload their sales figures daily. A Solutions Architect needs a durable storage solution for these documents that also protects against users accidentally deleting important documents. Which action will protect against unintended user actions?\*  
a- Store data in an EBS volume and create snapshots once a week.  
b- Store data in an S3 bucket and enable versioning.  
c- Store data in two S3 buckets in different AWS regions.  
d- Store data on EC2 instance storage.

**\*Question 16:\***  
\*An application saves the logs to an S3 bucket. A user wants to keep the logs for one month for troubleshooting purposes, and then purge the logs. What feature will enable this?\*  
a- Adding a bucket policy on the S3 bucket.  
b- Configuring lifecycle configuration rules on the S3 bucket.  
c- Creating an IAM policy for the S3 bucket.  
d- Enabling CORS on the S3 bucket.

**\*Question 17:\***  
\*A Solutions Architect is designing a critical business application with a relational database that runs on an EC2 instance. It requires a single EBS volume that can support up to 16,000 IOPS. Which Amazon EBS volume type can meet the performance requirements of this application?\*  
a- EBS Provisioned IOPS SSD  
b- EBS Throughput Optimized HDD  
c- EBS General Purpose SSD  
d- EBS Cold HDD

**Quiz 3**

1) A company is storing an access key (access key ID and secret access key) in a text file on a custom AMI. The company uses the access key to access DynamoDB tables from instances created from the AMI. The security team has mandated a more secure solution. Which solution will meet the security team’s mandate?  
A. Put the access key in an S3 bucket, and retrieve the access key on boot from the instance.  
B. Pass the access key to the instances through instance user data.  
C. Obtain the access key from a key server launched in a private subnet.  
D. Create an IAM role with permissions to access the table, and launch all instances with the new role.

2) Company salespeople upload their sales figures daily. A Solutions Architect needs a durable storage solution for these documents that also protects against users accidentally deleting important documents. Which action will protect against unintended user actions?  
A. Store data in an EBS volume and create snapshots once a week.  
B. Store data in an S3 bucket and enable versioning.  
C. Store data in two S3 buckets in different AWS regions.  
D. Store data on EC2 instance storage.

3) A Solutions Architect is designing a critical business application with a relational database that runs on an EC2 instance. It requires a single EBS volume that can support up to 16,000 IOPS. Which Amazon EBS volume type can meet the performance requirements of this application?  
A. EBS Provisioned IOPS SSD  
B. EBS Throughput Optimized HDD  
C. EBS General Purpose SSD  
D. EBS Cold HDD

4) An application running on EC2 instances processes sensitive information stored on Amazon S3. The information is accessed over the Internet. The security team is concerned that the Internet connectivity to Amazon S3 is a security risk. Which solution will resolve the security concern?  
A. Access the data through an Internet Gateway.  
B. Access the data through a VPN connection.  
C. Access the data through a NAT Gateway.  
D. Access the data through a VPC endpoint for Amazon S3.

5) A Solutions Architect is designing an online shopping application running in a VPC on EC2 instances behind an ELB Application Load Balancer. The instances run in an Auto Scaling group across multiple Availability Zones. The application tier must read and write data to a customer managed database cluster. There should be no access to the database from the Internet, but the cluster must be able to obtain software patches from the Internet.  
Which VPC design meets these requirements?  
A. Public subnets for both the application tier and the database cluster  
B. Public subnets for the application tier, and private subnets for the database cluster  
C. Public subnets for the application tier and NAT Gateway, and private subnets for the database cluster  
D. Public subnets for the application tier, and private subnets for the database cluster and NAT Gateway

6) Having just created a new VPC and launching an instance into its public subnet, you realise that you have forgotten to assign a public IP to the instance during creation. What is the simplest way to make your instance reachable from the outside world?  
A. Create an Elastic IP and new network interface. Associate the Elastic IP to the new network interface, and the new network interface to your instance.  
B. Associate the private IP of your instance to the public IP of the internet gateway.  
C. Create an Elastic IP address and associate it with your instance.  
D. Nothing – by default all instances deployed into any public subnet will automatically receive a public IP.

7) True or False: A subnet can span multiple Availability Zones.  
A. True  
B. False

8) By default, instances in new subnets in a custom VPC can communicate with each other across Availability Zones.  
A. True  
B. False

9)True or False: You can accelerate your application by adding a second internet gateway to your VPC.  
A. True  
B. False

10) When peering VPCs, you may peer your VPC only with another VPC in your same AWS account.  
A. True  
B. False

11) an application load balancer must be deployed into at least two subnets.  
A. True  
B. False

12) Which of the following allows you to SSH or RDP into an EC2 instance located in a private subnet?  
A. Bastion host  
B. NAT instance  
C. NAT Gateway  
D. Internet gateway

13) You have five VPCs in a 'hub and spoke' configuration, with VPC 'A' in the center and individually paired with VPCs 'B', 'C', 'D', and 'E', which make up the 'spokes'. There are no other VPC connections. Which of the following VPCs can VPC 'B' communicate with directly?  
A. VPC 'A'  
B. VPCs 'A' and 'C'  
C. VPCs 'A' and 'E'  
D. VPCs 'E', 'C' and 'D'

14) Security groups act like a firewall at the instance level, whereas \_\_\_\_\_\_\_\_\_ are an additional layer of security that act at the subnet level.  
A. Networks ACL  
B. Route table  
C. VPC security group  
D. DB security group

15) When I create a new security group, all outbound traffic is allowed by default.  
A. True  
B. False

16) By default, how many VPCs am I allowed in each AWS region?  
A. 1  
b. 2  
C. 6  
D. 5

17) To save administration headaches, a consultant advises that you leave all security groups in web-facing subnets open on port 22 to 0.0.0.0/0 CIDR. That way, you can connect wherever you are in the world. Is this a good security design?  
A. YES  
B. NO

18) A user has created a VPC with two subnets: one public and one private. The user is planning to run the patch update for the instances in the private subnet. How can the instances in the private subnet connect to the internet?  
a. Use the internet gateway with a private IP  
b. Allow outbound traffic in the security group for port 80 to allow internet updates  
c. The private subnet can never connect to the internet  
d. Use NAT with an elastic IP

19) A user has created a VPC with CIDR 20.0.0.0/16. The user has created one subnet with CIDR 20.0.0.1/16 by mistake. The user is trying to create another subnet of CIDR 20.0.0.1/24. How can the user create the second subnet?  
a. There is no need to update the subnet as VPC automatically adjusts the CIDR of the first subnet based on the second subnet’s CIDR  
b. The user can modify the first subnet CIDR from the console  
c. It is not possible to create a second subnet as one subnet with the same CIDR as the VPC has been created  
d. The user can modify the first subnet CIDR with AWS CLI

20) Which of the following are characteristics of Amazon VPC subnets? Choose 2 answers  
a. Each subnet maps to a single Availability Zone  
b. A CIDR block mask of /25 is the smallest range supported  
c. Instances in a private subnet can communicate with the Internet only if they have an Elastic IP.  
d. By default, all subnets can route between each other, whether they are private or public  
c. Each subnet spans at least 2 Availability zones to provide a high-availability environment\*Due Date\* : S

**Quiz 1 Answers:** 1-b, 2-a, 3-a, 4-a, 5-b, 6-a, 7-a, 8-c.a.d, 9-c, 10-b, 11-d, 12-c, 13-a, 14-b, 15-a, 16-c

**Quiz 2 Answers:** 1-b, 2-a, 3-c, 4-a, 5-b, 6-b, 7-a, 8-c, 9-b, 10-a, 11-b, 12-b, 13-a, 14-a, 15-b, 16-b, 17-a

**Quiz 3 Answers:** 1-d, 2-b, 3-a, 4-d, 5-c, 6-c, 7-b, 8-a, 9-b, 10-b, 11-a, 12-a, 13-a, 14-a, 15-a, 16-5, 17-NO, 18-d, 19-c, 20-a,d.