Question #91*Topic 1*

A company is seeing access requests by some suspicious IP addresses. The security team discovers the requests are from different IP addresses under the same CIDR range.  
What should a solutions architect recommend to the team?

* C. Add a deny rule in the inbound table of the network ACL with a lower number than other rules.

*C. Security groups are deny by default. Network ACLs by default allow everything outbound and everything inbound and you would create a dent rule with a lower number than all other rules so that it takes precedence.*

Question #92*Topic 1*

A company recently expanded globally and wants to make its application accessible to users in those geographic locations. The application is deploying on  
Amazon EC2 instances behind an Application Load balancer in an Auto Scaling group. The company needs the ability shift traffic from resources in one region to another.  
What should a solutions architect recommend?

C. Configure an Amazon Route 53 geoproximity fouling policy.

*Ans: C Geolocation routing policy – Use when you want to route traffic based on the location of your users. Geoproximity routing policy – Use when you want to route traffic based on the location of your resources and, optionally, shift traffic from resources in one location to resources in another. https://docs.aws.amazon.com/Route53/latest/DeveloperGuide/routing-policy.html*

Question #93*Topic 1*

A company wants to replicate its data to AWS to recover in the event of a disaster. Today, a system administrator has scripts that copy data to a NFS share  
Individual backup files need to be accessed with low latency by application administrators to deal with errors in processing.  
What should a solutions architect recommend to meet these requirements?

* **D. Modify the script to copy data to an AWS Storage Gateway for File Gateway virtual appliance instead of the on-premises NFS share.**

*The file gateway employs a local read/write cache to provide a low-latency access to data for file share clients in the same local area network (LAN) as the file gateway. Good read -* [*https://d0.awsstatic.com/whitepapers/aws-storage-gateway-file-gateway-for-hybrid-architectures.pdf*](https://d0.awsstatic.com/whitepapers/aws-storage-gateway-file-gateway-for-hybrid-architectures.pdf)

Question #94*Topic 1*

An application requires a development environment (DEV) and production environment (PROD) for several years. The DEV instances will run for 10 hours each day during normal business hours, while the PROD instances will run 24 hours each day. A solutions architect needs to determine a compute instance purchase strategy to minimize costs.  
Which solution is the MOST cost-effective?

* **C. DEV with Scheduled Reserved Instances and PROD with Reserved Instances**

[*https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-scheduled-instances.html*](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-scheduled-instances.html)

Question #95*Topic 1*

A company runs multiple Amazon EC2 Linux instances in a VPC with applications that use a hierarchical directory structure. The applications need to rapidly and concurrently read and write to shared storage.  
How can this be achieved?

* **A. Create an Amazon EFS file system and mount it from each EC2 instance.**

*Create an Amazon EFS file system and mount it from each EC2 instance.*

Question #96*Topic 1*

A solutions architect observes that a nightly batch processing job is automatically scaled up for 1 hour before the desired Amazon EC2 capacity is reached. The peak capacity is the same every night and the batch jobs always start at 1 AM. The solutions architect needs to find a cost-effective solution that will allow for the desired EC2 capacity to be reached quickly and allow the Auto Scaling group to scale down after the batch jobs are complete.  
What should the solutions architect do to meet these requirements?

* **C. Configure scheduled scaling to scale up to the desired compute level.**

Question #97*Topic 1*

A Solutions Architect must design a web application that will be hosted on AWS, allowing users to purchase access to premium, shared content that is stored in an  
S3 bucket. Upon payment, content will be available for download for 14 days before the user is denied access.  
Which of the following would be the LEAST complicated implementation?

* **C. Use an Amazon CloudFront distribution with an OAI. Configure the distribution with an Amazon S3 origin to provide access to the file through signed URLs. Design the application to sot an expiration of 14 days for the URL.**

*There is no maximum expiration time for CloudFront signed URLs, need to set DateLessThan* [*https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-creating-signed-url-custom-policy.html#private-content-custom-policy-statement-values*](https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-creating-signed-url-custom-policy.html#private-content-custom-policy-statement-values)

Question #98*Topic 1*

A solutions architect is designing a mission-critical web application. It will consist of Amazon EC2 instances behind an Application Load Balancer and a relational database. The database should be highly available and fault tolerant.  
Which database implementations will meet these requirements? (Choose two.)

* **D. MySQL-compatible Amazon Aurora Multi-AZ**
* **E. Amazon RDS for SQL Server Standard Edition Multi-AZ**

*Since the Multi-AZ support by Amazon RDS for MS SQL Server* [*https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\_SQLServerMultiAZ.html*](https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER_SQLServerMultiAZ.html)

Question #99*Topic 1*

A company's web application is running on Amazon EC2 instances behind an Application Load Balancer. The company recently changed its policy, which now requires the application to be accessed from one specific country only.  
Which configuration will meet this requirement?

* **C. Configure AWS WAF on the Application Load Balancer in a VPC.**

*Geographic (Geo) Match Conditions in AWS WAF. This new condition type allows you to use AWS WAF to restrict application access based on the geographic location of your viewers. With geo match conditions you can choose the countries from which AWS WAF should allow access.*

[*https://aws.amazon.com/about-aws/whats-new/2017/10/aws-waf-now-supports-geographic-match/*](https://aws.amazon.com/about-aws/whats-new/2017/10/aws-waf-now-supports-geographic-match/)

Question #100*Topic 1*

A solution architect has created two IAM policies: Policy1 and Policy2. Both policies are attached to an IAM group.  


A cloud engineer is added as an IAM user to the IAM group. Which action will the cloud engineer be able to perform?

* **C. Deleting Amazon EC2 instances**

*There is an explicit DENY on deleting directories in the second policy. So the only thing that can be deleted is EC2 instances as per the permission in the first policy.*

Question #101*Topic 1*

A company has an Amazon EC2 instance running on a private subnet that needs to access a public websites to download patches and updates. The company does not want external websites to see the EC2 instance IP address or initiate connection to it.  
How can a solution architect achieve this objective?

* **B. Create a NAT gateway in a public subnet. Route outbound traffic from the private subnet through the NAI gateway.**

*You can use a network address translation (NAT) gateway to enable instances in a private subnet to connect to the internet or other AWS services, but prevent the internet from initiating a connection with those instances.*

Question #102*Topic 1*

A company must migrate 20 TB of data from a data center to the AWS Cloud within 30 days. The company's network bandwidth is limited to 15 Mbps and cannot exceed 70% utilization. What should a solutions architect do to meet these requirements?

* **A. Use AWS Snowball.**

*With 15 Mbps connection at 70% utilization it will take months to transfer 20 TB data. So using Snowball is the best option. Hence answer is A.*

Question #103*Topic 1*

A company has a website running on Amazon EC2 instances across two Availability Zones. The company is expecting spikes in traffic on specific holidays, and wants to provide a consistent user experience. How can a solutions architect meet this requirement?

* **D. Use scheduled scaling.**

[*https://docs.aws.amazon.com/autoscaling/ec2/userguide/schedule\_time.html*](https://docs.aws.amazon.com/autoscaling/ec2/userguide/schedule_time.html)

Question #104*Topic 1*

An ecommerce company is running a multi-tier application on AWS. The front-end and backend tiers both run on Amazon EC2, and the database runs on Amazon  
RDS for MySQL. The backend tier communicates with the RDS instance. There are frequent calls to return identical datasets from the database that are causing performance slowdowns.  
Which action should be taken to improve the performance of the backend?

* **B. Implement Amazon ElastiCache to cache the large datasets.**

*Elasticache -> AWS Elasticache If the same read query is performed over and over again.*

Question #105*Topic 1*

A company has an on-premises data center that is running out of storage capacity. The company wants to migrate its storage infrastructure to AWS while minimizing bandwidth costs. The solution must allow for immediate retrieval of data at no additional cost.  
How can these requirements be met?

* **B. Deploy AWS Storage Gateway using cached volumes. Use Storage Gateway to store data in Amazon S3 while retaining copies of frequently accessed data subsets locally.**

*Stored volume gateways: often used as a way to backup your local storage volumes to Amazon S3 as EBS snapshots whilst ensuring your entire data library also remains locally on-premise for very low latency data access. Volumes created and configured within the storage gateway are backed by Amazon S3 and are mounted as iSCSI devices that your applications can then communicate with. ( backup of your local storage but not save local storage) Cached volume gateways: the primary data storage is actually on Amazon S3 rather than your own local storage solution. However cache volume gateways utilize your local data storage as a buffer and the cache for recently accessed data to help maintain low latency, hence the name, Cache Volumes. (save your local space with low latency access).*

Question #106*Topic 1*

A company is processing data on a daily basis. The results of the operations are stored in an Amazon S3 bucket, analyzed daily for one week, and then must remain immediately accessible for occasional analysis.  
What is the MOST cost-effective storage solution alternative to the current configuration?

* **C. Configure a lifecycle policy to transition the objects to Amazon S3 Standard-Infrequent Access (S3 Standard-IA) after 30 days.**

*Existing solution is retaining the result files for occasional analysis, while suggesting alternative we need to keep this in mind that it dont effect the existing functionality. In opinion Answer is C "S3 Standard IA". Problem with "S3 One Zone IA" is that there is still a risk of result files unavailability if AZ is down.*

Question #107*Topic 1*

A company delivers files in Amazon S3 to certain users who do not have AWS credentials. These users must be given access for a limited lime. What should a solutions architect do to securely meet these requirements?

* **B. Generate a presigned URL to share with the users.**

*Pre-signed URL Grant time-limited permissions* [*https://docs.aws.amazon.com/AmazonS3/latest/dev/ShareObjectPreSignedURL.html*](https://docs.aws.amazon.com/AmazonS3/latest/dev/ShareObjectPreSignedURL.html)

Question #108*Topic 1*

A company wants to run a hybrid workload for data processing. The data needs to be accessed by on-premises applications for local data processing using an  
NFS protocol, and must also be accessible from the AWS Cloud for further analytics and batch processing.  
Which solution will meet these requirements?

* **A. Use an AWS Storage Gateway file gateway to provide file storage to AWS, then perform analytics on this data in the AWS Cloud.**

*File gateway provides a virtual on-premises file server, which enables you to store and retrieve files as objects in Amazon S3. It can be used for on-premises applications, and for Amazon EC2-resident applications that need file storage in S3 for object based workloads. Used for flat files only, stored directly on S3. File gateway offers SMB or NFS-based access to data in Amazon S3 with local caching.*

Question #109*Topic 1*

A company plans to store sensitive user data on Amazon S3. Internal security compliance requirement mandate encryption of data before sending it to Amazon  
S3.  
What should a solution architect recommend to satisfy these requirements?

* **D. Client-side encryption with a master key stored in AWS Key Management Service (AWS KMS)**

*All should take note the question says data should be encrypted before going to s3..that is one of the basic facts concerning client side encryption. please refer to this link the very first sentence for a firm basis.* [*https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingClientSideEncryption.html*](https://docs.aws.amazon.com/AmazonS3/latest/dev/UsingClientSideEncryption.html)

Question #110*Topic 1*

A solutions architect is moving the static content from a public website hosted on Amazon EC2 instances to an Amazon S3 bucket. An Amazon CloudFront distribution will be used to deliver the static assets. The security group used by the EC2 instances restricts access to a limited set of IP ranges. Access to the static content should be similarly restricted.  
Which combination of steps will meet these requirements? (Choose two.)

* **A. Create an origin access identity (OAI) and associate it with the distribution. Change the permissions in the bucket policy so that only the OAI can read the objects.**
* **B. Create an AWS WAF web ACL that includes the same IP restrictions that exist in the EC2 security group. Associate this new web ACL with the CloudFront distribution.**

*A: ---* [*https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html*](https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html)

*B: ---* [*https://docs.aws.amazon.com/waf/latest/developerguide/classic-web-acl-ip-conditions.html*](https://docs.aws.amazon.com/waf/latest/developerguide/classic-web-acl-ip-conditions.html)

Question #111*Topic 1*

A company is investigating potential solutions that would collect, process, and store users' service usage data. The business objective is to create an analytics capability that will enable the company to gather operational insights quickly using standard SQL queries. The solution should be highly available and ensure  
Atomicity, Consistency, Isolation, and Durability (ACID) compliance in the data tier.  
Which solution should a solutions architect recommend?

* **C. Use a fully managed Amazon RDS for MySQL database in a Multi-AZ design**

*Amazon DynamoDB is a fully managed proprietary NoSQL database service that supports key-value and document data structures and is offered by Amazon.com as part of the Amazon Web Services portfolio. DynamoDB exposes a similar data model to and derives its name from Dynamo, but has a different underlying implementation. .A is not correct one. "C" is the right one.*

Question #112*Topic 1*

A company recently launched its website to serve content to its global user base. The company wants to store and accelerate the delivery of static content to its users by leveraging Amazon CloudFront with an Amazon EC2 instance attached as its origin.  
How should a solutions architect optimize high availability for the application?

**C. Configure another EC2 instance in a different Availability Zone as part of the origin group.**

*You can set up CloudFront with origin failover for scenarios that require high availability. To get started, you create an origin group with two origins: a primary and a secondary. If the primary origin is unavailable, or returns specific HTTP response status codes that indicate a failure, CloudFront automatically switches to the secondary origin. So the right answer is C.*

Question #113*Topic 1*

An application running on an Amazon EC2 instance in VPC-A needs to access files in another EC2 instance in VPC-B. Both are in separate. AWS accounts. The network administrator needs to design a solution to enable secure access to EC2 instance in VPC-B from VPC-A. The connectivity should not have a single point of failure or bandwidth concerns.  
Which solution will meet these requirements?

* **A. Set up a VPC peering connection between VPC-A and VPC-B.**

*A is correct and not D. Though D also looks correct. Reason is Private Virtual Interface will need to be created in that VPC from where you are trying to access the other VPC. This question says that EC2 instance from VPCA will access EC2 instance of VPC B, so ideally Private Virtaul Interface must be created in VPCA to meet the requirement whereas option D says to create it in VPCB. Hence, the option D is incorrect* [*https://aws.amazon.com/premiumsupport/knowledge-center/public-private-interface-dx/*](https://aws.amazon.com/premiumsupport/knowledge-center/public-private-interface-dx/)

Question #114*Topic 1*

A company currently stores symmetric encryption keys in a hardware security module (HSM). A solution architect must design a solution to migrate key management to AWS. The solution should allow for key rotation and support the use of customer provided keys.  
Where should the key material be stored to meet these requirements?

* **D. AWS Key Management Service (AWS KMS)**

*Why? KMS --> Manages all the keys to encrypt/decrypt stuff. Secrets Manager --> Manages passwords that are encrypted with KMS. The questions says that the HSM contains encryption keys not passwords for databases or other services, as a consequence it has to be D.*

Question #115*Topic 1*

A recent analysis of a company's IT expenses highlights the need to reduce backup costs. The company's chief information officer wants to simplify the on- premises backup infrastructure and reduce costs by eliminating the use of physical backup tapes. The company must preserve the existing investment in the on- premises backup applications and workflows.  
What should a solutions architect recommend?

* **D. Set up AWS Storage Gateway to connect with the backup applications using the iSCSI-virtual tape library (VTL) interface.**

*AWS Storage Gateway offers IT organizations a seamless way to transfer backup jobs from tape or Virtual Tape Library systems to the cloud – while keeping trusted backup tools and processes in place.* [*https://aws.amazon.com/storagegateway/vtl/*](https://aws.amazon.com/storagegateway/vtl/)

Question #116*Topic 1*

A company hosts an application on an Amazon EC2 instance that requires a maximum of 200 GB storage space. The application is used infrequently, with peaks during mornings and evenings. Disk I/O varies, but peaks at 3,000 IOPS. The chief financial officer of the company is concerned about costs and has asked a solutions architect to recommend the most cost-effective storage option that does not sacrifice performance.  
Which solution should the solutions architect recommend?

* **B. Amazon EBS General Purpose SSD (gp2)**

*SC1 & ST1 volume must be 500GB at least -> Eliminate A & D IO1 is more expensive than GP2 -> Eliminate C 200 GB of GP2 gives baseline of 200x3=600 IOPS and burstable to 3000 IOPS, then B is the correct answer.*

Question #117*Topic 1*

A company's application hosted on Amazon EC2 instances needs to access an Amazon S3 bucket. Due to data sensitivity, traffic cannot traverse the internet How should a solutions architect configure access?

* **B. Configure a VPC gateway endpoint for Amazon S3 in the VPC.**

*Anytime the connection happens inside the same VPC, think gateway!*

Question #118*Topic 1*

A company has two applications it wants to migrate to AWS. Both applications process a large set of files by accessing the same files at the same time. Both applications need to read the files with low latency.  
Which architecture should a solutions architect recommend for this situation?

**D. Configure two Amazon EC2 instances to run both applications. Configure Amazon Elastic File System (Amazon EFS) with General Purpose performance mode and Bursting Throughput mode to store the data.**

*Ans: D "We recommend the General Purpose performance mode for the majority of your Amazon EFS file systems. General Purpose is ideal for latency-sensitive use cases, like web serving environments, content management systems, home directories, and general file serving" https://docs.aws.amazon.com/efs/latest/ug/performance.html*

Question #119*Topic 1*

An ecommerce company has noticed performance degradation of its Amazon RDS based web application. The performance degradation is attributed to an increase in the number of read-only SQL queries triggered by business analysts. A solution architect needs to solve the problem with minimal changes to the existing web application.  
What should the solution architect recommend?

* **C. Create a read replica of the primary database and have the business analysts run their queries.**

*Minimal changes -> read replica*

Question #120*Topic 1*

A company is running a highly sensitive application on Amazon EC2 backed by an Amazon RDS database. Compliance regulations mandate that all personally identifiable information (PII) be encrypted at rest.  
Which solution should a solutions architect recommend to meet this requirement with the LEAST amount of changes to the infrastructure?

* **D. Configure Amazon Elastic Block Store (Amazon EBS) encryption and Amazon RDS encryption with AWS Key Management Service (AWS KMS) keys to encrypt instance and database volumes.**

*D seems to the right option as it will encrypt both the EC2 EBS volume and also the RDS database.* [*https://aws.amazon.com/blogs/security/how-to-protect-data-at-rest-with-amazon-ec2-instance-store-encryption/#:~:text=Encrypting%20data%20at%20rest%20is,application%20without%20a%20valid%20key.&text=For%20example%2C%20you%20can%20encrypt,)%20using%20AES%2D256%20encryption*](https://aws.amazon.com/blogs/security/how-to-protect-data-at-rest-with-amazon-ec2-instance-store-encryption/#:~:text=Encrypting%20data%20at%20rest%20is,application%20without%20a%20valid%20key.&text=For%20example%2C%20you%20can%20encrypt,)%20using%20AES%2D256%20encryption)

Question #121*Topic 1*

A company running an on-premises application is migrating the application to AWS to increase its elasticity and availability. The current architecture uses a  
Microsoft SQL Server database with heavy read activity. The company wants to explore alternate database options and migrate database engines, if needed.  
Every 4 hours, the development team does a full copy of the production database to populate a test database. During this period, users experience latency.  
What should a solution architect recommend as replacement database?

* **B. Use Amazon Aurora with Multi-AZ Aurora Replicas and restore snapshots from Amazon RDS for the test database.**

*B is the correct answer. Points to be noted in Q: 1. Question itself states " What should a solution architect recommend as replacement database?" 2. " users experience latency" when backup is taken from SQL Server. This means an alternate DB needs to be considered. Migrating to Aurora will eliminate this latency. For SQL Server, I/O activity is suspended briefly during backup - https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/USER\_CreateSnapshot.html 3. Elasticity, availability, replicas - everything is provided by Aurora*

Question #122*Topic 1*

A company has enabled AWS CloudTrail logs to deliver log files to an Amazon S3 bucket for each of its developer accounts. The company has created a central  
AWS account for streamlining management and audit reviews. An internal auditor needs to access the CloudTrail logs, yet access needs to be restricted for all developer account users. The solution must be secure and optimized.  
How should a solutions architect meet these requirements?

* **C. Configure CloudTrail from each developer account to deliver the log files to an S3 bucket in the central account. Create an IAM role in the central account for the auditor. Attach an IAM policy providing read-only permissions to the bucket.**

*C is the better option as cloudtrail can send logs directly to s3 bucket in other account.* [*https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-receive-logs-from-multiple-accounts.html*](https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-receive-logs-from-multiple-accounts.html)

Question #123*Topic 1*

A company has several business systems that require access to data stored in a file share. the business systems will access the file share using the Server  
Message Block (SMB) protocol. The file share solution should be accessible from both of the company's legacy on-premises environment and with AWS.  
Which services mod the business requirements? (Choose two.)

* **C. Amazon FSx for Windows**
* **E. AWS Storage Gateway file gateway**

*C,E Sure: Amazon FSx file storage is accessible from Windows, Linux, and MacOS compute instances and devices running on AWS or on premises AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. Storage Gateway provides a standard set of storage protocols such as iSCSI, SMB, and NFS, which allow you to use AWS storage without rewriting your existing applications.* https://docs.aws.amazon.com/fsx/latest/WindowsGuide/what-is.html E -> <https://aws.amazon.com/es/about-aws/whats-new/2018/06/aws-storage-gateway-adds> <https://aws.amazon.com/es/fsx/windows/-smb-support-to-store-objects-in-amazon-s3/>

Question #124*Topic 1*

A company is using Amazon EC2 to run its big data analytics workloads. These variable workloads run each night, and it is critical they finish by the start of business the following day. A solutions architect has been tasked with designing the MOST cost-effective solution.  
Which solution will accomplish this?

* **A. Spot Fleet**

*This is a typical use case for Spot Fleet. Scheduled Reserved Instance would have been a closer match than Reserved Instance. RI are very costly.* [*https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/spot-fleet.html*](https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/spot-fleet.html) *This works well for workloads such as big data and analytics, image and media rendering, machine learning, and high performance computing that may have a higher cost of interruption associated with restarting work and checkpointing. By offering the possibility of fewer interruptions, the capacityOptimized strategy can lower the overall cost of your workload.*

Question #125*Topic 1*

A company has a Microsoft Windows-based application that must be migrated to AWS. This application requires the use of a shared Windows file system attached to multiple Amazon EC2 Windows instances.  
What should a solution architect do to accomplish this?

* **C. Configure Amazon FSx for Windows File Server. Mount the Amazon FSx volume to each Windows Instance.**

*Amazon FSx for Windows File Server is the right option.*

Question #126*Topic 1*

A company has created an isolated backup of its environment in another Region. The application is running in warm standby mode and is fronted by an  
Application Load Balancer (ALB). The current failover process is manual and requires updating a DNS alias record to point to the secondary ALB in another  
Region.  
What should a solution architect do to automate the failover process?

* **B. Enable an Amazon Route 53 health check.**

*The objective is to automate the failover. Adding an HC to look at the LB can help do that. (assuming you set the Route53 to Active-Passive config as well)*

Question #127*Topic 1*

A company has a mobile chat application with a data store based in Amazon DynamoDB. Users would like new messages to be read with as little latency as possible. A solutions architect needs to design an optimal solution that requires minimal application changes.  
Which method should the solutions architect select?

* **A. Configure Amazon DynamoDB Accelerator (DAX) for the new messages table. Update the code to use the DAX endpoint.**

*Its A because you are cacheing the new messages table; table is in memory = very fast.* [*https://aws.amazon.com/premiumsupport/knowledge-center/dynamodb-high-latency/*](https://aws.amazon.com/premiumsupport/knowledge-center/dynamodb-high-latency/)

Question #128*Topic 1*

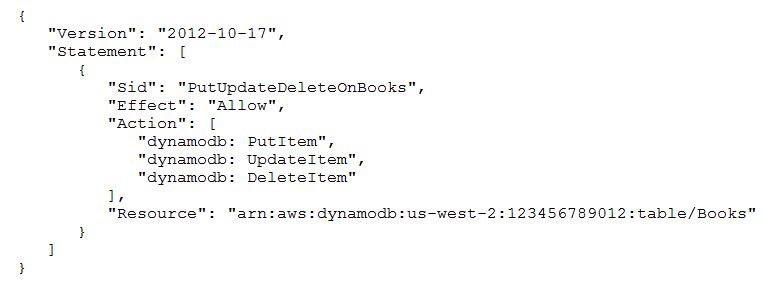
A company is creating an architecture for a mobile app that requires minimal latency for its users. The company's architecture consists of Amazon EC2 instances behind an Application Load Balancer running in an Auto Scaling group. The EC2 instances connect to Amazon RDS. Application beta testing showed there was a slowdown when reading the data. However the metrics indicate that the EC2 instances do not cross any CPU utilization thresholds.  
How can this issue be addressed?

* **C. Add read replicas for the RDS instances and direct read traffic to the replica.**

*Go with C. Nice move trying to misdirect you with Ec2 CPU threshold not reached. However the DB instance (RDS instance) may have its CPU at 100% as them EC2 are reading from it and the DB may not be strong enough to sustain. A read replica helps reduce the load. And that should solve the problem.*

Question #129*Topic 1*

A company has implemented one of its microservices on AWS Lambda that accesses an Amazon DynamoDB table named Books. A solutions architect is designing an IAM policy to be attached to the Lambda function's IAM role, giving it access to put, update, and delete items in the Books table. The IAM policy must prevent function from performing any other actions on the Books table or any other.  
Which IAM policy would fulfill these needs and provide the LEAST privileged access?  
**A.**



*Minimum Actions permission - Put / Update /Delete Presise Resource Selection - DynamoDB table /books*

Question #130*Topic 1*

A company hosts its website on Amazon S3. The website serves petabytes of outbound traffic monthly, which accounts for most of the company's AWS costs.  
What should a solutions architect do to reduce costs?

* **A. Configure Amazon CloudFront with the existing website as the origin.**

*Go with A "petabytes of outbound traffic monthly" - with this volume CloudFront is cost effective. https://aws.amazon.com/s3/pricing/ S3's best Cost is : Greater than 150 TB / Month $0.05 per GB https://aws.amazon.com/cloudfront/pricing/ Petabyte data cost range from : $0.030 to $0.020 per GB.*

Question #131*Topic 1*

A company runs a website on Amazon EC2 instances behind an ELB Application Load Balancer. Amazon Route 53 is used for the DNS. The company wants to set up a backup website with a message including a phone number and email address that users can reach if the primary website is down.  
How should the company deploy this solution?

* **A. Use Amazon S3 website hosting for the backup website and Route 53 failover routing policy.**

Question #132*Topic 1*

A media company is evaluating the possibility of moving its systems to the AWS Cloud. The company needs at least 10 TB of storage with the maximum possible  
I/O performance for video processing. 300 TB of very durable storage for storing media content, and 900 TB of storage to meet requirements for archival media that is not in use anymore.  
Which set of services should a solutions architect recommend to meet these requirements?

* **A. Amazon EBS for maximum performance, Amazon S3 for durable data storage, and Amazon S3 Glacier for archival storage.**

*i3.16xlarge Instance Store offers 15TB and is the best option for performance. https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/InstanceStorage.html S3 and Glacier fulfill other requirements.*

Question #133*Topic 1*

A company uses Amazon S3 as its object storage solution. The company has thousands of S3 buckets it uses to store data. Some of the S3 bucket have data that is accessed less frequently than others. A solutions architect found that lifecycle policies are not consistently implemented or are implemented partially? resulting in data being stored in high-cost storage.  
Which solution will lower costs without compromising the availability of objects?

* **C. Use S3 Intelligent-Tiering storage.**

Question #134*Topic 1*

An application is running on Amazon EC2 instances. Sensitive information required for the application is stored in an Amazon S3 bucket. The bucket needs to be protected from internet access while only allowing services within the VPC access to the bucket.  
Which combination of actions should solutions archived take to accomplish this? (Choose two.)

* **A. Create a VPC endpoint for Amazon S3**.
* **C. Apply a bucket policy to restrict access to the S3 endpoint.**

*A and C -* [*https://docs.aws.amazon.com/AmazonS3/latest/dev/example-bucket-policies-vpc-endpoint.html*](https://docs.aws.amazon.com/AmazonS3/latest/dev/example-bucket-policies-vpc-endpoint.html)

Question #135*Topic 1*

A web application runs on Amazon EC2 instances behind an Application Load Balancer. The application allows users to create custom reports of historical weather data. Generating a report can take up to 5 minutes. These long-running requests use many of the available incoming connections, making the system unresponsive to other users.  
How can a solutions architect make the system more responsive?

* **A. Use Amazon SQS with AWS Lambda to generate reports.**

*A. Prefer Asyncronus calls = SQS Go serverless = Lambda*