* Introduction to Cloud Computing and AWS Fundamentals
* AWS Global Infrastructure and Core Services
* Identity and Access Management (IAM) and Security Best Practices
* Networking and Compute Services in AWS
* Storage and Database Solutions
* Security, Compliance, and the Shared Responsibility Model
* Monitoring, Logging, and Management Tools
* Billing, Pricing, and Cost Management
* Migration and Transfer Services
* Exam Preparation and Key Concepts Review

**Introduction to Cloud Computing and AWS Fundamentals**

1. What is the primary benefit of cloud computing?

A) Reduced latency  
B) Increased control over infrastructure  
C**) Cost savings and scalability**  
D) Enhanced security features

2. Which of the following is a characteristic of AWS?

A) On-premises hardware maintenance

**B) Pay-as-you-go pricing**

C) Fixed capacity resources

D) Limited accessibility

**3. Which AWS service is primarily used for scalable object storage?**

A) Amazon EC2  
**B) Amazon S3**  
C) Amazon RDS  
D) AWS Lambda

**4. What is the purpose of Amazon EC2?**

A) To store large amounts of data  
B) To run applications in a serverless environment  
**C) To provide resizable compute capacity in the cloud**D) To manage databases

**5. Which AWS service allows you to run code without provisioning or managing servers?**

A) Amazon EC2  
**B) AWS Lambda**  
C) Amazon RDS  
D) Amazon S3

**6. What is the AWS Free Tier?**

A) A tier for only enterprise customers  
B) A limited-time trial for all AWS services  
C) A way to access paid services at a discounted rate  
D) **A free tier for specific services offered by AWS**

**7. Which of the following is a managed database service provided by AWS?**

**A) Amazon DynamoDB**B) Amazon EC2  
C) AWS CloudFormation  
D) AWS CodeDeploy

**8. What is the main function of Amazon CloudFront?**

A) To provide managed databases  
B) **To serve as a content delivery network (CDN)**C) To manage server instances  
D) To facilitate serverless computing

**9. What is a benefit of using AWS Identity and Access Management (IAM)?**

A) Provides hardware upgrades  
B) Automates software updates  
**C) Allows fine-grained access control to AWS resources**D) Increases storage capacity

**10. Which service would you use to monitor and manage AWS resources?**

A) AWS CloudTrail  
**B) Amazon CloudWatch**  
C) AWS Config  
D) AWS Systems Manager

**11. Which of the following best describes the term “elasticity” in cloud computing?**

A**) The ability to scale resources up and down automatically**  
B) The fixed capacity of computing resources  
C) The speed at which data is transferred  
D) The ability to store large amounts of data

**12. What is Amazon RDS primarily used for?**

A) Object storage  
B) Content delivery  
C) **Running relational databases**D) Serverless computing

**13. Which of the following services is used for creating virtual private networks (VPNs) in AWS?**

**A) Amazon VPC**  
B) AWS Direct Connect  
C) Amazon Route 53  
D) AWS CloudFormation

**14. What is the purpose of AWS Organizations?**

A) To manage network resources  
B) To provide identity management  
**C) To consolidate billing and manage multiple AWS accounts**D) To monitor application performance

15.  **Which of the following is a serverless data warehouse service provided by AWS?**

A) Amazon S3  
B) Amazon Redshift  
C) AWS Glue  
**D) Amazon Athena**

**16. Which AWS service can be used for building and deploying machine learning models?**

**A) Amazon SageMaker**  
B) Amazon CloudWatch  
C) AWS Elastic Beanstalk  
D) Amazon RDS

**17. What does the term "high availability" refer to in the context of cloud computing?**

A) The ability to store data securely  
B) **The ability to maintain uptime and reduce downtime**  
C) The speed of data transfer  
D) The amount of storage available

**18. Which AWS service is designed to provide a scalable and secure file storage solution?**

A) Amazon EBS  
**B) Amazon S3**  
C) Amazon EC2  
D) AWS Lambda

**19. What is AWS Lambda's pricing model based on?**

A) Monthly subscription fee  
**B) Number of requests and duration of execution**C) Size of the data stored  
D) Number of virtual machines used

**20. Which service provides insights into AWS resource usage and billing?**

A) AWS CloudTrail  
B) AWS Budgets  
C) Amazon CloudWatch  
**D) AWS Cost Explorer**

**AWS Global Infrastructure and Core Services**

**Which of the following components are part of the AWS Global Infrastructure?**

A) Regions  
B) Availability Zones  
C) Edge Locations  
D**) All of the above**

**What is an AWS Region?**

A) A data center in a specific geographic area  
**B) A collection of Availability Zones**  
C) A global network of servers  
D) A service for cloud management

**What is an Availability Zone (AZ)?**

A) A group of geographical regions  
**B) A fault-tolerant data center in an AWS Region**  
C) A storage solution for data  
D) A virtual machine hosted on AWS

**How does Amazon CloudFront improve the performance of applications?**

A) By storing data in a single location  
B) **By caching content at edge locations**  
C) By increasing server capacity  
D) By managing databases

**What is the primary function of Amazon Route 53?**

A) To manage virtual servers  
**B) To provide domain registration and DNS routing**  
C) To deliver content to users  
D) To monitor application performance

**Which AWS service is used to deploy applications in multiple regions for high availability?**

A) Amazon S3  
B) Amazon RDS  
**C) AWS Elastic Beanstalk**  
D) Amazon EC2

What does Amazon S3 stand for?

1. **Simple Storage Service**
2. B) Secure Storage Service
3. C) Scalable Storage Service
4. D) Serverless Storage Service

**Question: 119. Which AWS support plan assigns an AWS concierge agent to a company's account?**

**Options:**

* A. AWS Basic Support
* B. AWS Developer Support
* C. AWS Business Support
* D. AWS Enterprise Support

**Correct answer** D. AWS Enterprise Support

**Explanation:** AWS Enterprise Support is the highest tier of support offered by AWS and provides the most comprehensive and personalized assistance. An AWS concierge agent is a dedicated technical account manager who acts as a single point of contact for the company, helping optimize the AWS environment, resolve issues, and access AWS experts.

**Question: 34. A company wants to host its relational databases on AWS. The databases have predefined schemas that the company needs to replicate in AWS. Which AWS services could the company use for the databases? (Select TWO.)**

**Options:**

* A. Amazon Aurora
* B. Amazon RDS
* C. Amazon DocumentDB (with MongoDB compatibility)
* D. Amazon Neptune
* E. Amazon DynamoDB

**Correct answer** A. Amazon Aurora,B. Amazon RDS

**Explanation:** Amazon Aurora and Amazon RDS are AWS services that offer solutions for hosting relational databases with predefined schemas, providing the ability to replicate, scale, and manage these databases efficiently.

**Question: 136. Which AWS service or tool provides on-demand access to AWS security and compliance reports?**

**Options:**

* A. AWS Artifact
* B. AWS Trusted Advisor
* C. Amazon Inspector
* D. AWS Billing Console

**Correct answer** A. AWS Artifact

**Explanation:** AWS Artifact provides on-demand access to AWS security and compliance reports and agreements.

**Question: 171. Which capabilities are in the platform perspective of the AWS Cloud Adoption Framework (AWS CAF)? (Select TWO.)**

**Options:**

* A. Performance and capacity management
* B. Data engineering
* C. Continuous integration and continuous delivery (CI/CD)
* D. Infrastructure protection
* E. Change and release management

**Correct answer** B. Data engineering,C. Continuous integration and continuous delivery (CI/CD)

**Explanation:** These are two of the seven capabilities that are in the platform perspective of the AWS Cloud Adoption Framework (AWS CAF). The platform perspective helps you build a scalable and enterprise-grade hybrid cloud platform, modernize existing workloads, and implement new cloud-native solutions.

**Question: 37. A cloud engineer wants to know the percentage of allocated compute units that are in use for a specific Amazon EC2 instance. Which AWS service can provide this information?**

**Options:**

* A. AWS CloudTrail
* B. AWS Config
* C. Amazon CloudWatch
* D. AWS Artifact

**Correct answer** C. Amazon CloudWatch

**Explanation:** Amazon CloudWatch can provide this information through metrics that detail Amazon EC2 instance utilization, allowing users to view and optimize resource usage.

**Question: 158. (BONUS QUESTION SAA-03) A company is hosting a web application on AWS using a single Amazon EC2 instance that stores user-uploaded documents on an Amazon EBS volume. For better scalability and availability, the company duplicated the architecture and created a second EC2 instance and EBS volume in another Availability Zone, placing both behind an Application Load Balancer. After completing this change, users reported that each time they refreshed the website, they could see a subset of their documents or the other, but never all documents at the same time. What should the solutions architect propose to ensure users see all their documents at once?**

**Options:**

* A. Copy the data so both EBS volumes contain all documents
* B. Configure the Application Load Balancer to route a user to the server with the documents
* C. Copy the data from both EBS volumes to Amazon EFS. Modify the application to save new documents to Amazon EFS
* D. Configure the Application Load Balancer to send the request to both servers. Return each document from the correct server

**Correct answer** C. Copy the data from both EBS volumes to Amazon EFS. Modify the application to save new documents to Amazon EFS

**Explanation:** The ideal solution involves using Amazon EFS, which is a storage system that can be accessed simultaneously by multiple EC2 instances from different Availability Zones, ensuring that all users see all their documents regardless of the instance they are routed to by the Application Load Balancer.

**Question: 173. A company wants to generate a list of IAM users. The company also wants to view the status of various credentials associated with the users, such as passwords, access keys, and multi-factor authentication (MFA) devices. Which AWS service or feature will meet these requirements?**

**Options:**

* A. IAM credential report
* B. AWS IAM Identity Center (AWS Single Sign-On)
* C. AWS Identity and Access Management Access Analyzer
* D. AWS Cost and Usage Report

**Correct answer** A. IAM credential report

**Explanation:** An IAM credential report is a feature of AWS Identity and Access Management (IAM) that allows you to view and download a report that lists all the IAM users in your account and the status of their various credentials, such as passwords, access keys, and MFA devices.

**Question: 54. Which factors impact costs in the AWS Cloud? (Select TWO.)**

**Options:**

* A. Number of unused AWS Lambda functions
* B. Number of Amazon S3 buckets configured
* C. Data transfer in without acceleration
* D. Data transfer out without acceleration
* E. Compute resources that are currently in use

**Correct answer** D. Data transfer out without acceleration,E. Compute resources that are currently in use

**Explanation:** Data transfer out without acceleration and compute resources that are currently in use are factors that impact costs in the AWS Cloud.

**Question: 181. What is the purpose of having an Internet gateway within a VPC?**

**Options:**

* A. Create a VPN connection to the VPC
* B. Allow communication between the VPC and the Internet
* C. Enforce bandwidth restrictions on Internet traffic
* D. Load balance Internet traffic across Amazon EC2 instances

**Correct answer** B. Allow communication between the VPC and the Internet

**Explanation:** An Internet gateway is a service that allows Internet traffic to come into a VPC. Otherwise, a VPC is completely segmented and the only way to access it is potentially through a VPN connection rather than an Internet connection. An Internet gateway is a logical connection between an AWS VPC and the Internet. It supports IPv4 and IPv6 traffic and does not cause availability risks or bandwidth constraints on network traffic.

**Question: 189. A company needs to control incoming and outgoing traffic to an Amazon EC2 instance. Which AWS service or feature can the company associate with the EC2 instance to meet this requirement?**

**Options:**

* A. Network ACL
* B. Security group
* C. AWS WAF
* D. VPC route tables

**Correct answer** B. Security group

**Explanation:** A security group is a virtual firewall that can be associated with an Amazon EC2 instance to control incoming and outgoing traffic to and from the instance. You can specify which protocols, ports, and source or destination IP ranges are allowed or denied by the security group.

**Question: 165. A company provides a software as a service (SaaS) application. The company has a new customer that is based in a different country. The new customer's data needs to be hosted in that country. Which AWS service or infrastructure component should the company use to meet this requirement?**

**Options:**

* A. AWS Shield
* B. Amazon S3 Object Lock
* C. AWS Regions
* D. Placement groups

**Correct answer** C. AWS Regions

**Explanation:** AWS Regions are geographic areas around the world where AWS has clusters of data centers. By hosting the customer's data in a specific AWS Region, the company can meet the requirement of hosting the data in the customer's country.

**Question: 33. A company wants to migrate its on-premises relational data warehouse to AWS. The information in the data warehouse is used to feed analytics dashboards. Which AWS service should the company use for the data warehouse?**

**Options:**

* A. Amazon ElastiCache
* B. Amazon Aurora
* C. Amazon RDS
* D. Amazon Redshift

**Correct answer** D. Amazon Redshift

**Explanation:** Amazon Redshift is the AWS data warehousing service, specifically designed for analytics of large volumes of data and ideal for feeding analytics dashboards with large datasets.