1. What happens when an Amazon EC2 instance is terminated?  
   a) Data stored on EBS volumes is automatically backed up  
   b) The instance is stopped but can be restarted later  
   c) The associated Elastic IP is automatically detached  
   d) The root volume of the instance is deleted unless configured otherwise  
   **Answer:** d) The root volume of the instance is deleted unless configured otherwise
2. Which service helps in distributing incoming traffic across multiple EC2 instances?  
   a) Amazon CloudWatch  
   b) Amazon Route 53  
   c) AWS Load Balancer  
   d) AWS Shield  
   **Answer:** c) AWS Load Balancer

**Topic: AWS Load Balancer**

1. What is the main function of an Elastic Load Balancer (ELB)?  
   a) To monitor CPU utilization of EC2 instances  
   b) To distribute incoming application traffic across multiple targets  
   c) To create backups for Amazon RDS databases  
   d) To store and retrieve objects in AWS  
   **Answer:** b) To distribute incoming application traffic across multiple targets
2. Which type of Elastic Load Balancer is best suited for applications requiring routing based on HTTP headers and request paths?  
   a) Network Load Balancer  
   b) Classic Load Balancer  
   c) Application Load Balancer  
   d) Gateway Load Balancer  
   **Answer:** c) Application Load Balancer
3. What protocol does a Network Load Balancer use to handle requests?  
   a) TCP/UDP  
   b) HTTP/HTTPS  
   c) ICMP  
   d) FTP  
   **Answer:** a) TCP/UDP
4. Which AWS service can be used in combination with an Elastic Load Balancer to handle application scaling?  
   a) AWS Auto Scaling  
   b) AWS Lambda  
   c) Amazon CloudFront  
   d) Amazon S3  
   **Answer:** a) AWS Auto Scaling
5. What does an Elastic Load Balancer do when one of the EC2 instances it routes traffic to becomes unhealthy?  
   a) It continues to send traffic to the unhealthy instance  
   b) It automatically replaces the unhealthy instance  
   c) It stops sending traffic to the unhealthy instance and reroutes it to healthy instances  
   d) It restarts the unhealthy instance  
   **Answer:** c) It stops sending traffic to the unhealthy instance and reroutes it to healthy instances

**Topic: Amazon S3 (Simple Storage Service)**

1. What type of storage does Amazon S3 provide?  
   a) Block storage  
   b) File storage  
   c) Object storage  
   d) Cache storage  
   **Answer:** c) Object storage
2. Which S3 storage class is best for long-term archival storage with infrequent access?  
   a) S3 Standard  
   b) S3 One Zone-IA  
   c) S3 Glacier  
   d) S3 Intelligent-Tiering  
   **Answer:** c) S3 Glacier
3. What is the maximum size of a single object that can be uploaded to Amazon S3 in a single PUT operation?  
   a) 5 MB  
   b) 5 GB  
   c) 50 GB  
   d) 100 GB  
   **Answer:** b) 5 GB
4. How does Amazon S3 ensure high durability of stored data?  
   a) By encrypting data with AWS KMS  
   b) By automatically replicating data across multiple Availability Zones  
   c) By using EC2 instances for data storage  
   d) By requiring customers to back up data manually  
   **Answer:** b) By automatically replicating data across multiple Availability Zones
5. What feature of Amazon S3 allows users to control access to stored objects?  
   a) Amazon GuardDuty  
   b) S3 Access Control Lists (ACLs) and Bucket Policies  
   c) Amazon Route 53  
   d) AWS Identity and Access Management (IAM) only  
   **Answer:** b) S3 Access Control Lists (ACLs) and Bucket Policies

**Topic: AWS Auto Scaling**

1. What is the purpose of AWS Auto Scaling?  
   a) To increase EC2 instance sizes automatically  
   b) To automatically add or remove EC2 instances based on demand  
   c) To ensure that instances are always running at maximum capacity  
   d) To monitor application logs in real-time  
   **Answer:** b) To automatically add or remove EC2 instances based on demand
2. Which AWS component is necessary to define when configuring Auto Scaling?  
   a) Auto Scaling Group  
   b) CloudFront Distribution  
   c) Lambda Function  
   d) IAM Role  
   **Answer:** a) Auto Scaling Group
3. What metric does AWS Auto Scaling typically use to determine when to scale?  
   a) EC2 CPU utilization  
   b) EC2 instance launch time  
   c) Storage space available  
   d) AWS Lambda execution time  
   **Answer:** a) EC2 CPU utilization
4. What happens when an Auto Scaling policy reaches its maximum capacity?  
   a) Additional requests are queued until an instance is available  
   b) Auto Scaling terminates the least used instances  
   c) Auto Scaling stops launching new instances  
   d) The system crashes  
   **Answer:** c) Auto Scaling stops launching new instances
5. What AWS service can be integrated with Auto Scaling to distribute incoming traffic?  
   a) AWS CloudFormation  
   b) AWS Lambda  
   c) Elastic Load Balancer  
   d) AWS Step Functions  
   **Answer:** c) Elastic Load Balancer

**Topic: Amazon CloudFront**

1. What is the primary purpose of Amazon CloudFront?  
   a) To improve website performance by caching content at edge locations  
   b) To balance network traffic between multiple servers  
   c) To provide object storage with high durability  
   d) To monitor AWS infrastructure usage  
   **Answer:** a) To improve website performance by caching content at edge locations
2. What is an Edge Location in CloudFront?  
   a) A data center where AWS stores EC2 backups  
   b) A globally distributed location where cached content is stored  
   c) A special VPC subnet used for latency reduction  
   d) An alternate name for AWS Availability Zones  
   **Answer:** b) A globally distributed location where cached content is stored
3. Which AWS service is commonly used as an origin for CloudFront distributions?  
   a) AWS Lambda  
   b) Amazon S3  
   c) Amazon DynamoDB  
   d) AWS CloudTrail  
   **Answer:** b) Amazon S3
4. How does CloudFront reduce latency for users accessing web content?  
   a) By dynamically resizing images  
   b) By caching content at edge locations closer to users  
   c) By reducing the number of EC2 instances needed  
   d) By using AWS Lambda to process requests  
   **Answer:** b) By caching content at edge locations closer to users
5. Which CloudFront feature ensures that content is only accessible to authorized users?  
   a) AWS IAM Policies  
   b) Signed URLs and Signed Cookies  
   c) AWS Shield  
   d) AWS Glue  
   **Answer:** b) Signed URLs and Signed Cookies