**AWS Security**

1. What is AWS IAM used for?  
   A. Managing users and permissions  
   B. Managing storage  
   C. Launching EC2 instances  
   D. Monitoring network traffic  
   **Ans:** A
2. AWS KMS stands for:  
   A. Key Management Service  
   B. Key Monitoring System  
   C. Knowledge Management System  
   D. Key Mail Service  
   **Ans:** A
3. Which of the following helps to secure data at rest in AWS?  
   A. Encryption using KMS  
   B. Using S3 buckets without access control  
   C. Disabling all IAM policies  
   D. Public subnet placement  
   **Ans:** A
4. What is used to encrypt data in motion in AWS?  
   A. SSL/TLS  
   B. HTTP  
   C. FTP  
   D. SSH  
   **Ans:** A
5. AWS Compliance ensures:  
   A. Adherence to legal and regulatory requirements  
   B. Faster data transfer  
   C. Higher bandwidth  
   D. Cost savings  
   **Ans:** A
6. Which AWS service allows centralized control over cryptographic keys?  
   A. AWS KMS  
   B. AWS IAM  
   C. AWS CloudTrail  
   D. AWS CloudWatch  
   **Ans:** A
7. In AWS, what controls fine-grained permissions for users and resources?  
   A. IAM policies  
   B. S3 buckets  
   C. EC2 instances  
   D. Route 53  
   **Ans:** A
8. AWS Security best practice recommends:  
   A. Using MFA (Multi-Factor Authentication)  
   B. Sharing root account credentials  
   C. Using weak passwords  
   D. Disabling logging  
   **Ans:** A
9. Which AWS service records API calls for auditing?  
   A. AWS CloudTrail  
   B. AWS CloudWatch  
   C. AWS KMS  
   D. AWS IAM  
   **Ans:** A
10. Data privacy in AWS includes:  
    A. Ensuring data encryption and controlled access  
    B. Publicly exposing data  
    C. Using default security groups only  
    D. Disabling access logs  
    **Ans:** A
11. AWS allows data protection by:  
    A. Encrypting data and managing keys  
    B. Storing all data unencrypted  
    C. Avoiding backups  
    D. Sharing data openly  
    **Ans:** A
12. What is the purpose of IAM roles?  
    A. Assign permissions to AWS resources without sharing credentials  
    B. Store data  
    C. Launch instances  
    D. Monitor logs  
    **Ans:** A
13. Which AWS service provides automated security checks and compliance reports?  
    A. AWS Config  
    B. AWS IAM  
    C. AWS S3  
    D. AWS EC2  
    **Ans:** A
14. What type of data does AWS KMS primarily protect?  
    A. Encryption keys  
    B. EC2 instances  
    C. IAM users  
    D. DNS records  
    **Ans:** A
15. What AWS service can be used to track resource usage and activity logs for security analysis?  
    A. AWS CloudTrail  
    B. AWS SQS  
    C. AWS SES  
    D. AWS SNS  
    **Ans:** A

**AWS CloudTrail, CloudWatch, Docker, Kubernetes, Elastic Beanstalk, Messaging Services**

1. What is AWS CloudTrail used for?  
   A. Logging and monitoring API activity  
   B. Deploying applications  
   C. Managing databases  
   D. Load balancing traffic  
   **Ans:** A
2. AWS CloudWatch primarily provides:  
   A. Monitoring and alerting for AWS resources  
   B. Container orchestration  
   C. Message queuing  
   D. User authentication  
   **Ans:** A
3. Which service is used to deploy and manage Docker containers on AWS?  
   A. Amazon Elastic Kubernetes Service (EKS)  
   B. AWS IAM  
   C. AWS CloudTrail  
   D. Amazon S3  
   **Ans:** A
4. What does Kubernetes help with?  
   A. Orchestrating containerized applications  
   B. Managing DNS  
   C. Encrypting data  
   D. Sending emails  
   **Ans:** A
5. AWS Elastic Beanstalk is primarily used for:  
   A. Deploying and managing applications automatically  
   B. Database management  
   C. Message queuing  
   D. Storage  
   **Ans:** A
6. What is Amazon SNS used for?  
   A. Sending notifications to subscribers  
   B. Managing EC2 instances  
   C. Monitoring resources  
   D. Deploying containers  
   **Ans:** A
7. Amazon SQS stands for:  
   A. Simple Queue Service  
   B. Secure Query Service  
   C. Simple Query Service  
   D. Secure Queue System  
   **Ans:** A
8. What does Amazon SES provide?  
   A. Email sending service  
   B. Storage service  
   C. DNS management  
   D. Monitoring service  
   **Ans:** A
9. Which AWS service allows setting alarms based on metrics?  
   A. CloudWatch  
   B. CloudTrail  
   C. Elastic Beanstalk  
   D. IAM  
   **Ans:** A
10. Docker containers are:  
    A. Lightweight, portable units of software  
    B. Large virtual machines  
    C. Storage buckets  
    D. Security groups  
    **Ans:** A
11. Kubernetes clusters consist of:  
    A. Master node and worker nodes  
    B. Databases and buckets  
    C. User accounts and roles  
    D. DNS and IP addresses  
    **Ans:** A
12. Elastic Beanstalk supports which platforms?  
    A. Java, .NET, Node.js, Python, and more  
    B. Only Java  
    C. Only Python  
    D. Only Docker  
    **Ans:** A
13. Which AWS messaging service supports both push and pull messaging models?  
    A. Amazon SNS  
    B. Amazon SQS  
    C. AWS IAM  
    D. AWS CloudTrail  
    **Ans:** A
14. Amazon SQS is best suited for:  
    A. Decoupling and scaling microservices  
    B. Sending email notifications  
    C. Monitoring AWS usage  
    D. Container orchestration  
    **Ans:** A
15. Which AWS service helps monitor logs and set alarms based on thresholds?  
    A. CloudWatch Logs  
    B. CloudTrail  
    C. KMS  
    D. IAM  
    **Ans:** A

**Legal and Economic Challenges in Data Protection**

1. What is the primary purpose of data recovery?  
   A. Restore lost or corrupted data  
   B. Delete old data  
   C. Encrypt data  
   D. Send data via email  
   **Ans:** A
2. Which of the following is a common backup strategy?  
   A. Full backup  
   B. Single file transfer  
   C. Encryption only  
   D. No backup  
   **Ans:** A
3. Incremental backups save:  
   A. Only data changed since the last backup  
   B. All data every time  
   C. No data  
   D. Only system files  
   **Ans:** A
4. Copyright protects:  
   A. Original creative works  
   B. Facts and ideas  
   C. Government regulations  
   D. Public domain content  
   **Ans:** A
5. Intellectual Property Rights (IPR) include:  
   A. Copyrights, trademarks, and patents  
   B. Physical property only  
   C. Land ownership  
   D. Public infrastructure  
   **Ans:** A
6. International legal frameworks help:  
   A. Govern cross-border data privacy and protection  
   B. Promote piracy  
   C. Reduce cybersecurity  
   D. Ignore data protection laws  
   **Ans:** A
7. Data protection laws aim to:  
   A. Secure personal and sensitive data  
   B. Expose data publicly  
   C. Eliminate data backups  
   D. Reduce internet speed  
   **Ans:** A
8. Which is a major economic challenge of data protection?  
   A. High cost of implementing security measures  
   B. Low internet speed  
   C. Excessive data storage  
   D. Cheap software  
   **Ans:** A
9. Which international regulation governs data protection in the EU?  
   A. GDPR (General Data Protection Regulation)  
   B. HIPAA  
   C. PCI DSS  
   D. ISO 27001  
   **Ans:** A
10. Backup frequency depends on:  
    A. How critical the data is  
    B. Number of users  
    C. Internet speed  
    D. Size of storage device  
    **Ans:** A
11. Which is NOT part of intellectual property?  
    A. Trademark  
    B. Copyright  
    C. Patent  
    D. Public domain  
    **Ans:** D
12. Which is a potential legal risk in cloud data storage?  
    A. Data jurisdiction conflicts  
    B. Faster data transfer  
    C. Lower costs  
    D. Unlimited storage  
    **Ans:** A
13. Data backup and recovery is essential to:  
    A. Minimize data loss due to disasters  
    B. Increase data exposure  
    C. Eliminate data security  
    D. Promote data theft  
    **Ans:** A
14. Intellectual property rights help protect:  
    A. Creators’ inventions and expressions  
    B. Only physical assets  
    C. Publicly available information  
    D. Illegal downloads  
    **Ans:** A
15. Which of these is an international legal framework related to data?  
    A. Budapest Convention on Cybercrime  
    B. HIPAA only  
    C. GDPR only  
    D. AWS policies  
    **Ans:** A

**Budget and Cost Management, Resource Planning, ML Ecosystem in AWS**

1. What is a key component of AWS cost management?  
   A. Monitoring and controlling AWS usage  
   B. Increasing EC2 instance size  
   C. Ignoring unused resources  
   D. Avoiding backups  
   **Ans:** A
2. AWS Budgets helps users to:  
   A. Set custom cost and usage budgets  
   B. Delete instances automatically  
   C. Encrypt data at rest  
   D. Migrate databases  
   **Ans:** A
3. What is resource planning in cloud computing?  
   A. Allocating cloud resources efficiently  
   B. Creating user accounts  
   C. Setting up email servers  
   D. Managing security groups  
   **Ans:** A
4. Which AWS tool helps track service usage and billing?  
   A. AWS Cost Explorer  
   B. AWS IAM  
   C. Amazon S3  
   D. AWS Lambda  
   **Ans:** A
5. Amazon Comprehend is used for:  
   A. Natural language processing  
   B. Storage management  
   C. Monitoring resources  
   D. Security auditing  
   **Ans:** A
6. Amazon Forecast is primarily used for:  
   A. Time series forecasting and prediction  
   B. Managing databases  
   C. Email notifications  
   D. Hosting websites  
   **Ans:** A
7. Amazon Fraud Detector helps to:  
   A. Detect online fraud using machine learning  
   B. Monitor AWS usage  
   C. Store data securely  
   D. Send email campaigns  
   **Ans:** A
8. Amazon Kendra is a:  
   A. Intelligent search service powered by ML  
   B. Storage solution  
   C. Load balancer  
   D. Network firewall  
   **Ans:** A
9. Amazon Lex is used for building:  
   A. Conversational chatbots  
   B. Data lakes  
   C. Backup solutions  
   D. Security audits  
   **Ans:** A
10. Amazon SageMaker helps in:  
    A. Building, training, and deploying ML models  
    B. Setting up virtual networks  
    C. Email notifications  
    D. Managing user access  
    **Ans:** A
11. Amazon Textract is used for:  
    A. Extracting text and data from scanned documents  
    B. Managing storage buckets  
    C. Monitoring cloud resources  
    D. Managing databases  
    **Ans:** A
12. Amazon Transcribe converts:  
    A. Speech to text  
    B. Text to speech  
    C. Images to text  
    D. Data to encrypted format  
    **Ans:** A
13. Amazon Translate is a service for:  
    A. Language translation  
    B. Data migration  
    C. Data backup  
    D. Security monitoring  
    **Ans:** A
14. Budgeting in AWS helps to:  
    A. Avoid unexpected charges  
    B. Increase network speed  
    C. Reduce instance size automatically  
    D. Delete all data  
    **Ans:** A
15. Resource planning is important to:  
    A. Optimize cloud infrastructure costs  
    B. Increase backup size  
    C. Disable monitoring  
    D. Ignore cloud usage  
    **Ans:** A

**Data Analytics Tools in AWS**

1. Amazon Athena is used for:  
   A. Querying data stored in Amazon S3 using SQL  
   B. Storing data permanently  
   C. Managing EC2 instances  
   D. Monitoring cloud security  
   **Ans:** A
2. Amazon Redshift is primarily a:  
   A. Data warehouse service  
   B. File storage service  
   C. Machine learning platform  
   D. Messaging service  
   **Ans:** A
3. AWS Glue helps in:  
   A. Data cataloging and ETL (Extract, Transform, Load)  
   B. Network traffic control  
   C. Managing virtual machines  
   D. Deploying web applications  
   **Ans:** A
4. Amazon QuickSight is used for:  
   A. Business intelligence and visualization  
   B. Storage management  
   C. Access control  
   D. Backup automation  
   **Ans:** A
5. Amazon EMR stands for:  
   A. Elastic MapReduce, a big data processing service  
   B. Elastic Managed Runtime  
   C. Enterprise Managed Resources  
   D. External Messaging Router  
   **Ans:** A
6. AWS Data Pipeline is designed to:  
   A. Move and process data between different AWS services  
   B. Manage user permissions  
   C. Host websites  
   D. Encrypt data  
   **Ans:** A
7. AWS Lake Formation is used for:  
   A. Building secure data lakes  
   B. Virtual private networking  
   C. Email notifications  
   D. Cloud storage backups  
   **Ans:** A
8. Amazon Kinesis is primarily for:  
   A. Real-time data streaming and analytics  
   B. Database management  
   C. Image processing  
   D. Storage scaling  
   **Ans:** A
9. Amazon Timestream is a:  
   A. Time series database service  
   B. Data encryption tool  
   C. File transfer service  
   D. Load balancing service  
   **Ans:** A
10. SageMaker is used for:  
    A. Machine learning model building and deployment  
    B. Data storage  
    C. Network monitoring  
    D. Email filtering  
    **Ans:** A
11. AWS Glue can automate:  
    A. Data discovery and schema inference  
    B. Security auditing  
    C. Load balancing  
    D. Cloud migration  
    **Ans:** A
12. Amazon QuickSight supports:  
    A. Interactive dashboards and reports  
    B. Email automation  
    C. Real-time streaming only  
    D. Physical server management  
    **Ans:** A
13. Which AWS service is best for big data processing using Hadoop or Spark?  
    A. Amazon EMR  
    B. AWS Lambda  
    C. Amazon S3  
    D. Amazon RDS  
    **Ans:** A
14. Data pipelines help in:  
    A. Automating data workflows  
    B. Encrypting data at rest  
    C. Managing user authentication  
    D. Monitoring network traffic  
    **Ans:** A
15. Amazon Lake Formation improves data lake security by:  
    A. Centralized access control and permissions  
    B. Increasing data storage limits  
    C. Automating backups  
    D. Disabling data encryption  
    **Ans:** A

**AWS Developer Tools and Migration Tools**

1. AWS X-Ray is used for:  
   A. Debugging and analyzing distributed applications  
   B. Encrypting S3 buckets  
   C. Automating backups  
   D. Managing user identities  
   **Ans:** A
2. AWS Cloud9 is:  
   A. A cloud-based integrated development environment (IDE)  
   B. A database service  
   C. A storage solution  
   D. A monitoring tool  
   **Ans:** A
3. AWS CodeBuild helps in:  
   A. Building and testing source code automatically  
   B. Managing EC2 instances  
   C. Hosting web applications  
   D. Encrypting data  
   **Ans:** A
4. AWS CodeCommit is:  
   A. A source control service for hosting Git repositories  
   B. A monitoring service  
   C. A database migration tool  
   D. A messaging service  
   **Ans:** A
5. AWS CodePipeline is used for:  
   A. Automating continuous integration and delivery workflows  
   B. Encrypting data at rest  
   C. Managing virtual machines  
   D. Sending notifications  
   **Ans:** A
6. AWS Database Migration Service (DMS) helps to:  
   A. Migrate databases to AWS with minimal downtime  
   B. Backup S3 buckets  
   C. Monitor network traffic  
   D. Manage user authentication  
   **Ans:** A
7. AWS Server Migration Service (SMS) is used for:  
   A. Automating migration of on-premises servers to AWS  
   B. Managing email servers  
   C. Data encryption  
   D. Hosting containers  
   **Ans:** A
8. AWS Migration Hub provides:  
   A. A central location to track migration progress across multiple tools  
   B. A data encryption service  
   C. Cloud monitoring dashboards  
   D. User access management  
   **Ans:** A
9. Which AWS service allows you to write, run, and debug code in the cloud?  
   A. AWS Cloud9  
   B. AWS CodeBuild  
   C. AWS Lambda  
   D. Amazon EC2  
   **Ans:** A
10. Continuous Integration and Continuous Deployment (CI/CD) pipelines are best managed using:  
    A. AWS CodePipeline  
    B. Amazon S3  
    C. AWS Glue  
    D. Amazon RDS  
    **Ans:** A
11. Which tool is specifically designed for source control management in AWS?  
    A. AWS CodeCommit  
    B. AWS CodeBuild  
    C. AWS Cloud9  
    D. AWS X-Ray  
    **Ans:** A
12. AWS X-Ray primarily helps developers by:  
    A. Tracing requests and diagnosing errors in distributed applications  
    B. Encrypting data  
    C. Automating backups  
    D. Migrating databases  
    **Ans:** A
13. AWS Migration Hub can integrate with which migration services?  
    A. AWS DMS and AWS SMS  
    B. Amazon S3 and AWS Lambda  
    C. AWS Glue and Amazon Athena  
    D. AWS Cloud9 and AWS CodeBuild  
    **Ans:** A
14. AWS CodeBuild automatically scales:  
    A. Build servers to meet the build volume  
    B. EC2 instance types  
    C. Database sizes  
    D. Storage volumes  
    **Ans:** A
15. The primary benefit of using AWS CodePipeline is:  
    A. Automating software release processes  
    B. Increasing storage capacity  
    C. Managing user permissions  
    D. Backing up data  
    **Ans:** A