

1. Identify the wrong statement.

- A. Identity and access management (IAM) is a framework for business processes that facilitates the management of electronic or digital identities
- B. With IAM technologies, IT managers can control user access to critical information within their organizations
- C. Identity and access management products offer role-based access control
- D. In IAM roles are defined according to the ability of an individual user to perform a specific task, such as view, create or modify a file

2. Which of these is Identity in IAM?

- A. Users
- B. Groups
- C. Roles
- D. All of these

3. IAM role:

- A. Is an entity that you create in AWS
- B. Is to give people the ability to sign in to the AWS Management Console for interactive tasks and to make programmatic requests to AWS services using the API or CLI
- C. A and B both
- D. None of these

4. Choose the below statements are true or false for AWS:

1.. When you create an IAM user, you grant it permissions by making it a member of a group that has appropriate permission policies attached (recommended), or by directly attaching policies to the user

2. You can also clone the permissions of an existing IAM user, which automatically makes the new user a member of the same groups and attaches all the same policies.

- A. True, True
- B. True, False
- C. False, True
- D. False, False

5. IAM group:

- A. Is same as IAM users
- B. Can be used to specify permissions for a collection of users
- C. Is truly an identity
- D. All of these

6.Which of these is IAM principal?

- A. A user
- B. A role
- C. An application
- D. All of these

7.How does AWS Lambda manage scaling of functions?

- A. Automatically scales based on CPU utilization
- B. Scales based on the number of concurrent invocations
- C. Requires manual scaling through instance types
- D. Utilizes Docker containers for scaling

8.What is the Lambda execution environment based on?

- A. AWS EC2 instances
- B. AWS Fargate
- C. Docker containers
- D. Custom runtime environments

9.What is AWS Lambda Layers used for?

- A. Managing Lambda function versions and aliases
- B. Storing and sharing code and dependencies across multiple Lambda functions
- C. Defining IAM policies for Lambda execution roles
- D. Configuring VPC settings for Lambda functions

10.How can AWS Lambda be used in real-time data processing applications? Provide an example scenario.

11.Which of the following options is used to launch an EC2 instance with a specific set of preconfigured software and settings?

- A. Elastic IP
- B. Elastic Load Balancer
- C. Amazon Machine Image (AMI)
- D. Instance Type

12.What is the purpose of an Elastic IP address in Amazon EC2?

- A. To dynamically allocate memory to an instance
- B. To provide a persistent static IP address for dynamic cloud computing
- C. To balance the load across multiple instances
- D. To scale up the CPU of an instance automatically

13..What is the maximum duration you can reserve an EC2 instance with a Reserved Instance?

- A. 1 year
- B. 2 years
- C. 3 years
- D. 5 years

14.You are running a web application on a fleet of EC2 instances behind an Elastic Load Balancer (ELB). Suddenly, you notice a significant increase in traffic that is causing high CPU utilization and slowing down your application. What steps would you take to handle the increased traffic and ensure your application remains responsive?

15.Which of the following protocols can be used to serve content from CloudFront?

- A. HTTP, HTTPS, and RTMP
- B. FTP, HTTP, and SMTP
- C. HTTP, HTTPS, and RTSP
- D. HTTP, SMTP, and TCP

16.What is the default Time To Live (TTL) for objects in CloudFront caches?

- A. 24 hours
- B. 30 days
- C. 7 days
- D. 48 hours

17.You are using CloudFront to distribute large software updates to your global customer base. Which of the following configurations would be ideal for this use case? (Select TWO options)

- A. Set a long TTL to reduce the number of requests reaching the origin server
- B. Enable compression to reduce the size of objects transferred
- C. Configure CloudFront to forward all cookies to the origin server
- D. Use a custom origin header to identify the software update version

18.How can you version your files in CloudFront to ensure that your users always get the latest versions?

- A. Include a unique version number in the file name
- B. Set a short TTL and rely on ETag headers for caching
- C. Use CloudFront signed URLs with an expiration time
- D. Enable query string forwarding and caching in CloudFront behaviors

19. Which of the following cache behaviors is suitable for dynamic content that changes frequently and cannot be cached?

- A. Forward all queries to the origin server without caching
- B. Set a short TTL and cache based on query string parameters
- C. Use origin request policy to cache based on header values
- D. Enable CloudFront's dynamic content caching feature

20. You have a CloudFront distribution set up to distribute content from an S3 bucket. How can you restrict access to your content to only users with a specific cookie?

- A. Enable cookie forwarding in CloudFront and set a whitelist in the origin S3 bucket policy
- B. Configure a `lambda@edge` function to validate the cookie and allow or block requests
- C. Use signed URLs with a cookie parameter to control access to the content
- D. Set the cookie as a whitelist header in the origin request policy

21. What happens when a CloudFront edge location receives a request for an object that is not currently in its cache?

- A. It returns a 404 Not Found error to the user
- B. It forwards the request to the origin server and caches the response
- C. It checks other edge locations in the same region for the object before requesting from the origin
- D. It redirects the user to the origin server's URL for that object

22. You are using CloudFront to distribute large video files. Some users report buffering issues. Which CloudFront feature can help improve performance for these users?

- A. Enable edge optimization for large files
- B. Use a custom origin header to identify video files
- C. Configure a `lambda@edge` function to optimize video delivery
- D. Set a long TTL and enable compression for video files

23. The maximum storage time for a message in AWS SQS is?

- A. 7 days
- B. 14 days
- C. 21 days
- D. 1 Month

24. In AWS SNS, what is a topic?

- A. A category for organizing messages
- B. A unique identifier for subscribers
- C. A queue for storing messages
- D. An endpoint for message delivery

25..In AWS SNS, what is the maximum number of subscribers allowed per topic?

- A. 100
- B. 1000
- C. Unlimited
- D. 10,000

26.Which AWS service can be used to monitor the number of messages in an SQS queue and trigger an alert based on thresholds?

- A. Amazon CloudWatch
- B. AWS Config
- C. AWS CloudTrail
- D. AWS Trusted Advisor

27..Which of the following is NOT a valid message delivery mode in AWS SNS?

- A. HTTP/HTTPS
- B. SMS
- C. Email
- D. FTP

28.Which Amazon S3 feature enables you to configure an event-driven architecture by triggering AWS Lambda functions, SNS notifications, or SQS messages when certain events occur in your S3 bucket?

- A. Amazon S3 Transfer Acceleration
- B. Amazon S3 Event Notifications
- C. Amazon S3 Object Lock
- D. Amazon S3 Select

29.Which Amazon S3 feature allows you to configure access policies that control access to your buckets and objects based on a set of rules specified by the user?

- A. Amazon S3 Transfer Acceleration
- B. Amazon S3 Bucket Policies
- C. Amazon S3 Object Lock
- D. Amazon S3 Batch Operations

30..Which of the following is a key benefit of using Amazon S3 for storing data?

- A. Unlimited storage capacity
- B. Low-latency data retrieval
- C. Automatic data encryption
- D. Real-time data analytics

31. Define all types of Storage Classes in AWS S3?

32. What AWS service is used to create and manage virtual private networks in the cloud?

- A. Amazon VPC
- B. Amazon EC2
- C. AWS Direct Connect
- D. Amazon Route 53

33. A company's VPC has the CIDR block 172.16.0.0/21 (2048 addresses). It has two subnets (A and B). Each subnet must support 100 usable addresses now, but this number is expected to rise to as most 254 usable addresses soon. Which subnet addressing scheme meets the requirements and follows AWS best practices?

- A. Subnet A: 172.16.0.0/25 (128 addresses) Subnet B: 172.16.0.128/25 (128 addresses)
- B. Subnet A: 172.16.0.0/25 (128 addresses) Subnet B: 172.16.0.128/25 (128 addresses)
- C. Subnet A: 172.16.0.0/23 (512 addresses) Subnet B: 172.16.2.0/23 (512 addresses)
- D. Subnet A: 172.16.0.0/22 (1042 addresses) Subnet B: 172.16.4.0/22 (1024 addresses)

34. You're tasked with setting up a Virtual Private Cloud (VPC) in AWS for a new project. The project requires a public subnet for web servers accessible from the internet and a private subnet for database servers that should not be accessible from the internet. Design the VPC architecture and subnet configuration based on the following requirements:

- The VPC should have a total of 4192 IP addresses.
- The public subnet should have 1024 IP addresses.
- The private subnet should have 256 IP addresses.
- Web servers in the public subnet should have internet access.
- Database servers in the private subnet should not have direct internet access but should be able to communicate with the web servers in the public subnet.

35. What is the purpose of AWS Lambda?

- A. Managing databases in the cloud
- B. Storing and retrieving large amounts of data
- C. Scaling EC2 instances automatically
- D. Running code without provisioning or managing servers

36. Which AWS service can be used to host a static website?

- A. Amazon S3
- B. Amazon EC2
- C. AWS Lambda
- D. Amazon RDS

37. API Gateway is an AWS service that supports:

- A. REST API

- B. HTTP API
- C. WebSocket API
- D. All of these

38. An API gateway is what?

39. Which is a correct API Endpoint type in AWS?

- A. Edge-optimized API endpoint
- B. Private API endpoint
- C. Regional API endpoint
- D. All of these

40. The connection between API Gateway and backend integrations such as Lambda functions is:

- A. Persistent
- B. Invoked as needed
- C. Either A or B both are a possible option
- D. None of these