

📖 EASY (10 Questions)

Q1. AWS is primarily a:

- A. On-premises server solution
 - B. Cloud computing platform
 - C. Version control system
 - D. Virtual machine hypervisor
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Q2. Amazon EC2 provides:

- A. Managed databases
 - B. Scalable virtual server instances
 - C. Object storage
 - D. Serverless function execution
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Q3. AWS Lambda is used for:

- A. Launching virtual machines
 - B. Running serverless functions without managing servers
 - C. Hosting relational databases
 - D. Managing IAM roles
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Q4. Amazon S3 is primarily used for:

- A. Virtual machine provisioning
 - B. Object storage in the cloud
 - C. Lambda function execution
 - D. Networking configuration
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Q5. Which AWS service allows creation of isolated virtual networks?

- A. VPC
 - B. EC2
 - C. Lambda
 - D. CloudFront
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Q6. When launching an EC2 instance, you must choose:

- A. A Lambda runtime
 - B. An AMI (Amazon Machine Image)
 - C. S3 bucket policies
 - D. VPC route tables only
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Q7. By default, an S3 bucket:

- A. Is private
 - B. Is publicly accessible
 - C. Cannot store objects larger than 1 MB
 - D. Does not require an AWS account
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Q8. Public subnets in AWS VPC:

- A. Can route traffic to the internet via an Internet Gateway
 - B. Cannot access the internet
 - C. Must contain Lambda functions only
 - D. Are automatically private
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Q9. Private subnets in AWS VPC are typically used to host:

- A. Public websites
 - B. Backend servers and databases
 - C. Internet gateways
 - D. S3 buckets
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Q10. Which AWS component allows secure access between EC2 instances in different subnets?

- A. Internet Gateway
 - B. Security Groups and Route Tables
 - C. Lambda
 - D. CloudWatch
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☐ **MEDIUM (15 Questions)**

Q11. To connect a public EC2 instance to the internet, you must attach:

- A. Private IP
 - B. Elastic IP and Internet Gateway
 - C. NAT Gateway only
 - D. S3 bucket
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Q12. Which of the following is a correct AWS Lambda use case?

- A. Hosting a relational database
 - B. Event-driven image resizing
 - C. Launching EC2 VMs
 - D. Storing large objects
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Q13. In AWS, the difference between public and private subnets is:

- A. Only CIDR notation
 - B. Internet accessibility
 - C. S3 permissions
 - D. EC2 instance type
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Q14. Which AWS service is best for storing logs, backups, and media files?

- A. EC2
 - B. S3
 - C. Lambda
 - D. VPC
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Q15. What is the default VPC CIDR block for AWS?

- A. 10.0.0.0/16
 - B. 172.16.0.0/16
 - C. 192.168.0.0/16
 - D. 0.0.0.0/0
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Q16. Scenario: You want to allow HTTP traffic to your private EC2 instance via a public EC2. What AWS feature is essential?

- A. Security Groups and SSH only
 - B. NAT Gateway
 - C. Security Groups and curl from public instance
 - D. Direct Internet Gateway
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Q17. Which AWS feature allows execution of code without provisioning servers?

- A. EC2 Auto Scaling
 - B. Lambda functions
 - C. S3 bucket
 - D. VPC Peering
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Q18. Elastic IP in AWS is used for:

- A. Private IP addressing
 - B. Static public IP for EC2 instances
 - C. VPC subnet masking
 - D. Lambda execution
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Q19. Security Groups in AWS:

- A. Act as virtual firewalls for EC2 instances
 - B. Provide automatic scaling
 - C. Store objects securely
 - D. Create serverless functions
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Q20. In AWS, a VPC route table is used to:

- A. Encrypt S3 objects
 - B. Direct network traffic between subnets and gateways
 - C. Launch EC2 instances
 - D. Run Lambda functions
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Q21. Which AWS EC2 instance type is best for compute-intensive workloads?

- A. T2.micro
 - B. C5
 - C. S3 Standard
 - D. Lambda runtime
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Q22. Scenario: You must allow a private EC2 instance to download updates from the internet. What is required?

- A. Internet Gateway
 - B. NAT Gateway
 - C. Elastic IP
 - D. Public subnet
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Q23. Amazon S3 buckets have global uniqueness because:

- A. Each object has a unique ID
 - B. Bucket names are globally unique across AWS
 - C. Subnets ensure uniqueness
 - D. Lambda functions manage names
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Q24. AWS EC2 user-data scripts are executed:

- A. At every reboot
 - B. During initial instance launch
 - C. Only on private instances
 - D. Only on public instances
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Q25. Scenario: You need secure communication between EC2 instances in public and private subnets. Which AWS services ensure this?

- A. IAM and S3
 - B. Security Groups and Private IP routing
 - C. Lambda triggers
 - D. CloudWatch alarms
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HARD (15 Questions)

Q26. Scenario: Create a VPC named `ditiss-lab` with CIDR `172.20.0.0/16`. Assign `172.20.5.0/24` to public subnet and `172.20.10.0/24` to private subnet. Which AWS component is required for the public subnet to access the internet?

- A. NAT Gateway
 - B. Internet Gateway
 - C. S3 Endpoint
 - D. VPC Peering
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Q27. During the EC2 setup, which step ensures that the private instance can respond to curl requests from the public instance?

- A. Attach Internet Gateway to private subnet
 - B. Configure Security Groups to allow HTTP traffic between instances
 - C. Assign Elastic IP to private instance
 - D. Launch Lambda function
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Q28. Scenario: You launched an EC2 instance in the private subnet. How can it access AWS S3 without internet?

- A. NAT Gateway
 - B. VPC Endpoint for S3
 - C. Direct Internet Gateway
 - D. Elastic IP
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Q29. Which AWS service allows event-driven execution of code when an S3 object is uploaded?

- A. EC2
 - B. Lambda
 - C. VPC
 - D. CloudWatch
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Q30. Which command sequence correctly tests HTTP access from public EC2 to private EC2?

- A. ssh → curl private IP → check response
 - B. ping S3 bucket → HTTP test
 - C. curl public subnet → private subnet automatically
 - D. IAM role assignment → HTTP test
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Q31. For high availability, which EC2 feature is recommended?

- A. Single availability zone deployment
 - B. Multi-AZ deployment
 - C. Public subnet only
 - D. Lambda integration
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Q32. Elastic Load Balancer in a VPC primarily helps to:

- A. Launch EC2 instances
- B. Distribute traffic among multiple EC2 instances
- C. Manage Lambda executions
- D. Store objects in S3

Q33. Scenario: An HTTP request from public EC2 fails to private EC2. Which troubleshooting step is correct?

- A. Check Security Group inbound rules
 - B. Recreate VPC
 - C. Delete EC2 instance
 - D. Modify IAM role only
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Q34. Which AWS feature allows versioning and recovery of S3 objects?

- A. Bucket policies
 - B. Versioning
 - C. Lifecycle rules
 - D. Route tables
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Q35. AWS Lambda function memory and execution timeout are configured at:

- A. VPC level
 - B. Function configuration
 - C. EC2 instance type
 - D. S3 bucket
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Q36. Which AWS component defines network address allocation and subnetting?

- A. IAM
 - B. VPC
 - C. Lambda
 - D. S3
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Q37. Scenario: You want private EC2 instance to fetch updates from the internet, but do not want it directly exposed. Best practice:

- A. Assign Elastic IP
 - B. Use NAT Gateway in public subnet
 - C. Attach Internet Gateway to private subnet
 - D. Create Lambda function only
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Q38. Security best practice for AWS S3 buckets is:

- A. Make all buckets public
 - B. Enable least-privilege IAM policies
 - C. Use Elastic IP
 - D. Attach EC2 instance
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Q39. In AWS, a subnet is considered “private” if:

- A. It has no route to the internet gateway
 - B. It has public IP addresses
 - C. It contains Lambda functions
 - D. It uses Elastic IP only
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Q40. Scenario: After installing httpd on private EC2, `curl` from public EC2 fails. Most likely reason:

- A. Security Group rules not allowing port 80
- B. Lambda configuration error
- C. S3 bucket permissions
- D. EC2 instance type mismatch