

AWS Cloud Practitioner - Exam Prep A

1. Your organization has decided to adopt "infrastructure as code" with AWS CloudFormation for new infrastructure launched into your AWS accounts. Which pillar of the Well-Architected Framework is this recommendation included in?
 - ☒ a. Operational Excellence
 - b. Security
 - c. Fault Tolerance
 - d. Cost Optimization
2. Your company is moving a self-managed database over to AWS, and it will be running on EC2 for at least 3 years. They want to avoid any large expenses up-front but want to reduce the monthly cost as much as possible. What EC2 pricing model should you recommend?
 - a. Dedicated Host
 - ☒ b. Reserved - 3 year - No Upfront
 - c. On-Demand Instance
 - d. Reserved - 3 year - Partial Upfront
3. What is the least costly support plan that provides 24/7 access to documentation, whitepapers, and support forums?
 - a. Business
 - b. Developer
 - ☒ c. Basic
 - d. Enterprise
4. You want to launch multiple EC2 instances that all have the same operating system customizations. What would you need to create so that each of these instances included those customizations?
 - a. Amazon S3 Bucket
 - ☒ b. Custom Amazon Machine Image (AMI)
 - c. Amazon Virtual Private Cloud (VPC)
 - d. Amazon Elastic File System (EFS)

5. Which managed service could provide distribution of incoming traffic across multiple Amazon EC2 instances?
- a. Amazon Elasticsearch
 - b. AWS Elastic Beanstalk
 - c. Elastic Load Balancing**
 - d. AWS Auto Scaling
6. Your organization has decided to experiment with Machine Learning for a specific business problem. Later the same day, the team has a Machine Learning environment up and running in AWS to begin experimentation. Which cloud benefit is illustrated in this scenario?
- a. Loose coupling
 - b. Agility**
 - c. Design for failure
 - d. Elasticity
7. Which of the following are pillars of the AWS Well-Architected Framework? (select three)
- a. Fault Tolerance
 - b. Operational Excellence**
 - c. Security**
 - d. Cost Optimization**
 - e. High Availability
8. Which element of AWS Global infrastructure consists of multiple Availability Zones?
- a. Edge Location
 - b. Region**
 - c. Point of Presence
 - d. Data Center
9. What feature of a Virtual Private Cloud (VPC) works like a virtual firewall for the network?
- a. Subnets
 - b. Virtual Private Gateways
 - c. Security Groups**
 - d. Internet Gateways

10. Which AWS service enables organizations to create a private link between their data center and an AWS region that doesn't travel over the public Internet?
- ☒ a. AWS Direct Connect
 - b. AWS Site to Site Connect
 - c. AWS Cloud VPN
 - d. Amazon Direct Cloud
11. Which service provides nearly limitless object storage with multiple storage classes covering use cases from frequent access to archive storage?
- ☒ a. Amazon S3
 - b. AWS CloudStorage
 - c. Amazon EFS
 - d. Amazon EBS
12. Which service can give you a secure and encrypted connection to a Virtual Private Cloud (VPC) on AWS over the public Internet?
- a. AWS Direct Connect
 - b. AWS GuardDuty
 - ☒ c. AWS Virtual Private Network (VPN)
 - d. AWS Key Management Service
13. Your organization frequently deploys a standard web application stack for new applications. What AWS service would enable them to define this common infrastructure in code and also detect any drift to the stack configuration of a deployed application?
- ☒ a. AWS CloudFormation
 - b. AWS Resource Manager
 - c. AWS CodeCommit
 - d. AWS CodeDeploy
14. Which pricing factors are considered when using AWS Lambda? (choose two)
- ☒ a. Duration (based on the memory allocated)
 - b. Number of instances
 - c. Maximum concurrent instances
 - ☒ d. Number of requests
 - e. Instance size

15. Which architectural principle is illustrated in the following statement:

"Isolate the behavior of a component from other components that depend on it, increasing resiliency and agility."

- a. Least privilege access
- b. High availability
- c. Tight coupling
- d. Loose coupling**

16. Which tool can be used to automate the creation and management of multiple account AWS environments?

- a. AWS Cost Explorer
- b. Identity and Access Management
- c. AWS Directory Service
- d. AWS Control Tower**

17. Which AWS service allows you to manage multiple AWS accounts, simplify billing for all accounts, and apply policies for governance of those accounts?

- a. AWS Directory Service
- b. AWS Accounts
- c. AWS CloudFormation
- d. AWS Organizations**

18. Which AWS managed service provides the ability to setup and manage relational databases for the most common database engines?

- a. AWS Database Migration Tool
- b. Amazon Relational Database Service (RDS)**
- c. Amazon SimpleDB
- d. Amazon DynamoDB

19. What AWS service can be leveraged in the deployment of your custom software to Amazon EC2 and AWS Fargate?

- a. AWS CodeCommit
- b. AWS CodeDeploy**
- c. AWS CodeGuru
- d. AWS CodeArtifact

20. Which service provides a NoSQL cloud database with single-digit millisecond latency that operates as a key-value and document store?
- a. Amazon SimpleDB
 - b. Amazon Aurora
 - c. Amazon DynamoDB**
 - d. Amazon EBS
21. Which of the following would not be factored into a TCO comparison analysis of switching to the cloud from a traditional data center?
- a. Cost of purchasing data storage hardware
 - b. Custom software development**
 - c. Utility costs for data center
 - d. Cost of purchasing servers
22. Within the Shared Responsibility Model, which areas would be the responsibility of the customer? (choose three)
- a. Management of Edge Locations
 - b. Encryption of data in transit**
 - c. User access management**
 - d. Data center network connectivity
 - e. Encryption of data at rest**
23. Which disaster recovery approach would result in the lowest cost?
- a. Backup and Restore**
 - b. Warm Standby
 - c. ~~Multi-site~~
 - d. Pilot Light
24. How will implementing elasticity in your cloud application reduce your TCO over implementing it in your traditional data center?
- a. Increasing compute capability
 - b. Increasing unused capacity
 - c. Reducing unused capacity**
 - d. Increasing speed of data transfer

25. Which fully managed AWS service uses machine learning to both detect and protect your data that is stored in AWS?
- a. AWS CloudFormation
 - b. AWS GuardDuty
 - c. Network Access Control Lists (ACL's)
 - d. Amazon Macie**
26. You are looking to move a new web application into the cloud. Your organization has asked for a cost estimate on this application. What tool could you use to estimate costs for this new cloud workload?
- a. AWS Cost Explorer
 - b. AWS Trusted Advisor
 - c. AWS Pricing Calculator or Simple Monthly Calculator**
 - d. Cost and Usage Reports (CUR)
27. Which of the following services is a highly-available managed domain name system (DNS) service?
- a. Amazon Domain Name Service
 - b. Amazon Route 53**
 - c. AWS Elastic Beanstalk
 - d. AWS Elastic Routing
28. Your organization is working on an incident management and investigation policy now that they have moved a pilot application onto the cloud with AWS. Which pillar of the AWS Well-Architected Framework recommends the creation of this policy?
- a. Performance Efficiency
 - b. Security**
 - c. Reliability
 - d. Cost Optimization

29. According to the concept of least privilege access, what should you setup when adding permissions for an IAM user?
- a. Grant a user admin permissions on a separate AWS account that is a part of your AWS Organization
 - b. Grant the user permissions to access all services in the environment
 - c. Grant the user has permissions for only the items needed by that user to perform a task**
 - d. Grant the user permissions for what they will need along with commonly used services to avoid repeated modification to policies
30. You are looking to launch a static website with minimal configuration. Which of the following AWS services provides this feature?
- a. Amazon CloudWatch
 - b. Amazon Redshift
 - c. AWS CodeDeploy
 - d. Amazon S3**
31. Which online tool provides guidance in following AWS best practices by providing personalized recommendations for your cloud workloads?
- a. AWS Trusted Advisor**
 - b. AWS Personal Health Dashboard
 - c. AWS Well-Architected Framework
 - d. Amazon CloudWatch
32. Your organization is looking to review best practices for AWS prior to implementing their first cloud application. What resource would best meet this need?
- a. AWS Trusted Advisor
 - b. AWS CloudFormation
 - c. AWS Well-Architected Framework**
 - d. AWS Marketplace

33. What is the minimum AWS support plan that provides the complete set of AWS Trusted Advisor checks?
- a. Developer
 - b. Business**
 - c. Enterprise
 - d. Basic
34. Which AWS service enables you to protect your web application by using a rule-based system to detect traffic and actions that should be blocked?
- a. Amazon CloudWatch
 - b. Amazon Macie
 - c. AWS Web Application Firewall (WAF)**
 - d. AWS GuardDuty
35. Your US-based team wants to expand an internal application to your office in Singapore. They are able to take the application and spin up a version in the ap-southeast-1 region. Which benefit of cloud computing is best illustrated with this scenario?
- a. Stop guessing capacity
 - b. Go global in minutes**
 - c. Stop spending money running and maintaining data centers
 - d. Trade capital expense for variable expense
36. Within the Shared Responsibility Model, what area would be the responsibility of the customer?
- a. Patching data center network routers
 - b. Patching the OS for RDS instances
 - c. Data center security
 - d. Patching the OS on EC2 instances**
37. What will IAM users use to authenticate themselves when using the AWS CLI?
- a. Group credentials
 - b. Access keys per IAM user**
 - c. Username and password
 - d. Access keys for the root user

38. What AWS service enables auditing of your AWS account by logging actions taken on your AWS resources?
- a. AWS CloudHSM
 - b. AWS CloudFormation
 - c. AWS GuardDuty
 - d. AWS CloudTrail**
39. How can you configure the same permissions for multiple IAM users?
- a. Have multiple users leverage the same IAM user to reduce maintenance
 - b. Create an IAM group, assign permissions to the group, and add IAM users to the group**
 - c. Create an IAM role, assign permissions to the role
 - d. Copy and paste the same policy JSON to a unique policy for each user
40. Which AWS service enables you to use your own keys to encrypt data on AWS using a hardware security module (HSM)?
- a. AWS Key Management Service (KMS)
 - b. AWS CloudHSM**
 - c. AWS Identity and Access Management (IAM)
 - d. Amazon Macie
41. Your organization is adopting a hybrid approach for storage and wants to leverage the cloud as a backup while having low latency access to data on its local network. Which AWS service could be leveraged for this?
- a. AWS Storage Gateway**
 - b. Amazon Elastic Block Store (EBS)
 - c. Amazon S3 Glacier
 - d. Amazon S3
42. Which service provides an in-memory data store that supports both Redis and Memcached?
- a. Amazon ElastiCache**
 - b. Amazon EFS
 - c. Amazon RDS
 - d. Amazon DynamoDB

43. When deploying an application across multiple availability zones, which design concept are you implementing?
- a. Elasticity
 - b. Agility
 - c. Design for failure**
 - d. Cost Optimization
44. Which AWS concept is the definition of the information required to launch an EC2 instance including the contents of the root volume, launch permissions, and block device mapping?
- a. Amazon Machine Image (AMI)**
 - b. Amazon Elastic Block Store (EBS)
 - c. Amazon Elastic Filesystem (EFS)
 - d. ~~Amazon EC2 Instance Image (EII)~~
45. Your organization is looking to test a new web application concept. The team setup an AWS account and infrastructure within a day on which they will build a prototype for this application. Which cloud computing benefit does this illustrate?
- a. Go global in minutes
 - b. Stop guessing capacity
 - c. Increase speed and agility**
 - d. Hybrid cloud
46. Which element of the AWS Global Infrastructure is made up of one or more data centers connected by a low latency network with redundant power, networking, and connectivity within an AWS Region?
- a. Edge Location
 - b. Regional Edge Cache
 - c. Point of Presence
 - d. Availability Zone**
47. How can you improve the security of your IAM user account?
- a. Setup Amazon Shield for your account
 - b. Implement AWS VPN when using the AWS Console
 - c. Enable multi-factor authentication**
 - d. Setup Amazon Macie for your account

48. Your company is looking to perform batch data analysis using an EC2 instance. There is a flexible start and stop time for this workload, and it can stop and restart as needed. What would be the most cost effective EC2 pricing model given these requirements?
- ☒ a. Spot Instance
 - b. On-Demand Instance
 - c. Dedicated Host
 - d. Reserved Instance
49. What tool would you leverage to make a case within your organization for moving to the cloud from a traditional data center?
- ☒ a. TCO Calculator
 - b. Cost and Usage Reports (CUR)
 - c. AWS Pricing Calculator or Simple Monthly Calculator
 - d. AWS Cost Explorer
50. When you deploy your application across multiple AWS availability zones, which architectural principle are you implementing?
- a. Loose coupling
 - b. Cross-region reliability
 - c. Tight coupling
 - ☒ d. High availability
51. Your company needs to launch a MySQL database in the cloud for a web application. They will need to have access to the underlying operating system to install OS-level optimizations. What solution would meet these requirements?
- a. Utilize DynamoDB
 - b. Utilize Amazon Aurora on Amazon RDS
 - ☒ c. Utilize MySQL on Amazon EC2
 - d. Utilize Amazon SimpleDB

52. Your company is migrating to the cloud. You have multiple licenses for server software that is licensed per server. Which EC2 pricing model should you choose for the instances when you launch them in AWS?
- a. Consolidated Instance
 - b. Dedicated Host**
 - c. Spot Instance
 - d. Reserved Instance
53. Which tool enables you to visualize current AWS costs and predict future costs based on current usage?
- a. AWS Pricing Calculator
 - b. AWS Trusted Advisor
 - c. Cost and Usage Reports (CUR)
 - d. AWS Cost Explorer**
54. Which AWS service would enable you to share reserved instances across multiple accounts that your company manages?
- a. AWS Organizations**
 - b. Amazon CloudWatch
 - c. AWS CloudFormation
 - d. AWS Direct Connect
55. You want to have email support within business hours from AWS for an application you are building. What is the minimum support plan that provides this?
- a. Basic
 - b. Enterprise
 - c. Business
 - d. Developer**
56. Which service provides a highly-available and elastic NFS file system for both cloud-based and on-premise servers?
- a. Amazon S3 Glacier
 - b. Amazon S3
 - c. Amazon Elastic File System (EFS)**
 - d. Amazon Elastic Block Store (EBS)

57. If you wanted to engage AWS resources for a paid engagement to assist in a cloud migration, which team would you leverage?
- a. AWS Professional Services
 - b. AWS Marketplace
 - c. AWS Service Gateway
 - d. AWS Partner Network Consulting Partners
58. Your company is moving their data storage from their data center into the cloud. They are evaluating different approaches for data warehousing. What AWS service provides a managed data warehousing solution that supports columnar storage up to a petabyte scale?
- a. AWS Database Migration Service
 - b. Amazon DynamoDB
 - c. Amazon SimpleDB
 - d. Amazon Redshift
59. Within the Shared Responsibility Model, what responsibility is shared by both the customer and AWS?
- a. Customer Data
 - b. Data Center Physical Security
 - c. Configuration Management
 - d. Edge Location Management
60. Which of the following is an economic benefit of migrating to the cloud?
- a. Eliminating Operational Expenditures (opex)
 - b. Increased Capitalized Expenditures (capex)
 - c. ~~Increased Operational Expenditures (opex)~~
 - d. Reduced Total Cost of Ownership (TCO)
61. Which AWS service provides the ability to assess and audit configuration of the AWS resources you have deployed in your account?
- a. Amazon CloudWatch
 - b. AWS Config
 - c. AWS Identity and Access Management (IAM)
 - d. AWS GuardDuty

62. Your company has deployed a new web application across multiple availability zones for high availability. What pillar of the Well-Architected Framework recommends this approach?
- a. Operational Excellence
 - b. Fault Tolerance
 - c. Reliability**
 - d. Cost Optimizations
63. Which of the following services could assist in migrating your data from your on-premise data center into AWS?
- a. AWS CloudFormation
 - b. Amazon CloudWatch
 - c. AWS Snowball**
 - d. AWS Cloud Migrate
64. When your team moved an application into the cloud, they implemented elasticity so that the application could scale to meet the current user demand. Which cloud computing benefit is best illustrated with this scenario?
- a. Stop spending money running and maintaining data centers
 - b. Go global in minutes
 - c. Trade capital expense for variable expense
 - d. Stop guessing capacity**
65. Your organization is looking to leverage both their traditional data center and the public cloud. What type of cloud architecture does this describe?
- a. Isolated cloud
 - b. Private cloud
 - c. Public cloud
 - d. Hybrid cloud**