Q1) Through which of the following interfaces is AWS Identity and Access Management available?
A) AWS Management Console
B) Command line interface (CLI)
C) IAM Query API
D) Existing libraries

- ⚪ A, B and C
- ⚪ Only through Command line interface (CLI)
- ⚪ A and C
- ✅ All of the above

Q2) State whether the following statement holds True or False. "Without IAM, you cannot control the tasks a particular user or system can do and what AWS resources they might use."

- ⚪ INCORRECT
- ✅ CORRECT

Q3) In the 'Detailed' monitoring data available for your Amazon EBS volumes, Provisioned IOPS volumes automatically send _____ minute metrics to Amazon CloudWatch.

- ✅ 1
Explanation:-Data is available automatically in 5-minute periods at no charge. This includes data for the root device volumes for EBS-backed instances. Provisioned IOPS SSD (io1) volumes automatically send one-minute metrics to CloudWatch. ... You can get the data using either the CloudWatch API or the Amazon EC2 console. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using_cloudwatch_ebs.html#:~:text=Data%20is%20available%20automatically%20in,volumes%20for%20for%20EBS%2Dbacked%20instances.&text=Provisioned%20IOPS%20SSD%20(%20io1%20)%20volumes,one%2Dminute%20metrics
- ⚪ 2
- ⚪ 5
- ⚪ 3

Q4) When an EC2 EBS-backed (EBS root) instance is stopped, what happens to the data on any ephemeral store volumes?

- ✅ Data will be deleted and will no longer be accessible.
Explanation:-An Amazon EBS-backed instance can be stopped and later restarted without affecting data stored in the attached volumes. There are various instance– and volume-related tasks you can do when an Amazon EBS-backed instance is in a stopped state. For example, you can modify the properties of the instance, change its size, or update the kernel it is using, or you can attach your root volume to a different running instance for debugging or any other purpose. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/RootDeviceStorage.html
- ⚪ Data is unavailable until the instance is restarted.
- ⚪ Data is automatically saved in an EBS volume.
- ⚪ Data is automatically saved as an EBS snapshot.

Q5) State whether the following statement is True or False. "If you add a tag that has the same key as an existing tag on a DB Instance, the new value overwrites the old value."

- ⚪ INCORRECT
- ✅ CORRECT

Q6) The SQL Server _____ feature is an efficient means of copying data from a source database to your DB Instance. It writes the data that you specify to a data file, such as an ASCII file.

- ⚪ group copy
- ✅ bulk copy
Explanation:-The SQL Server bulk copy feature is an efficient means of copying data from a source database to your DB instance. Bulk copy writes the data that you specify to a data file, such as an ASCII file. You can then run bulk copy again to write the contents of the file to the destination DB instance. Refer: https://docs.aws.amazon.com/AmazonRDS/latest/UserGuide/SQLServer.Procedural.Importing.Snapshots.html
- ⚪ dual copy
- ⚪ mass copy

Q7) You nave multiple Amazon EC2 instances running in a cluster across multiple Availability Zones within the same region. What combination of the following should be used to ensure the highest network performance (packets per second), lowest latency, and lowest jitter? (Select 3 answers)

- ✅ Amazon Linux
- ⚪ Amazon HVM AMI
- ⚪ Amazon PV AMI
- ✅ Enhanced networking
- ✅ Amazon EC2 placement groups
- ⚪ Amazon VPC

Q8) What does Amazon ElastiCache provide?

- ✅ A managed In-memory cache service.
- ⚪ An Amazon EC2 instance with the Memcached software already pre-installed.
- ⚪ A virtual server with a huge amount of memory.
Explanation:-Amazon ElastiCache improves the performance of web applications by allowing you to retrieve information from a fast, managed, in-memory system, instead of relying entirely on slower disk-based databases. Refer: https://aws.amazon.com/elasticache/faqs/
- ⚪ A service by this name doesn't exist. Perhaps you mean Amazon CloudCache.

Q9) Do the system resources on the Micro instance meet the recommended configuration for Oracle?

- ⚪ Not in any circumstance
- ✅ Yes but only for certain situations
- ⚪ Yes completely

Q10) How are the EBS snapshots saved on Amazon S3?

- ⚪ EBS snapshots are not stored in the Amazon S3
- ✅ Incrementally
Explanation:-You can back up the data on your Amazon EBS volumes to Amazon S3 by taking point-in-time snapshots. Snapshots are incremental backups, which means that only the blocks on the device that have changed after your most recent snapshot are saved. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EBSSnapshots.html#:~:text=You%20can%20back%20up%20the,most%20recent%20snapshot%20are%20saved.
- ⚪ Exponentially
- ⚪ Decrementally

Q11) When automatic failover occurs, Amazon RDS will emit a DB Instance event to inform you that automatic failover occurred. You can use the _____ to return information about events related to your DB Instance

- ✅ DescribeEvents
Explanation:-Yes, Amazon RDS will emit a DB instance event to inform you that automatic failover occurred. You can click the "Events" section of the Amazon RDS Console or use the DescribeEvents API to return information about events related to your DB instance. You can also use Amazon RDS Event Notifications to be notified when specific DB events occur. Refer: https://aws.amazon.com/rds/faqs/
- ⚪ DescriveFailure
- ⚪ FetchFailure
- ⚪ FetchEvents

Q12) You have launched an Amazon Elastic Compute Cloud (EC2) instance into a public subnet with a primary private IP address assigned, an internet gateway is attached to the VPC, and the public route table is configured to send all Internet-based traffic to the Internet gateway. The instance security group is set to allow all outbound traffic but cannot access the internet. Why is the Internet unreachable from this instance?

- ⚪ The instance security group must allow all inbound traffic.
- ⚪ The internet gateway security group must allow all outbound traffic.
- ✅ The instance does not have a public IP address.
- ⚪ The instance "Source/Destination check" property must be enabled.

Q13) If you're unable to connect via SSH to your EC2 instance, which of the following should you check and possibly correct to restore connectivity?

- ✅ Adjust the instance's Security Group to permit ingress traffic over port 22 from your IP.
- ⚪ Modify the instance security group to allow ingress of ICMP packets from your IP.
- ⚪ Configure the IAM role to permit changes to security group settings.
- ⚪ Adjust Security Group to permit egress traffic over TCP port 443 from your IP.
- ⚪ Apply the most recently released Operating System security patches.

Q14) What does the AWS Storage Gateway provide?

- ⚪ A direct encrypted connection to Amazon S3.
- ⚪ It's a backup solution that provides an on-premises Cloud storage.
- ✅ It allows to integrate on-premises IT environments with Cloud Storage.
Explanation:-AWS Storage Gateway is a hybrid cloud storage service that gives you on-premises access to virtually unlimited cloud storage. Customers use Storage Gateway to simplify storage management and reduce costs for key hybrid cloud storage use cases. Refer: https://aws.amazon.com/storagegateway/#:~:text=AWS%20Storage%20Gateway%20is%20a,hybrid%20cloud%20storage%20use%20cases.
- ⚪ It provides an encrypted SSL endpoint for backups in the Cloud.

Q15) What are two advantages of Elastic IP (EIP) over AWS public IPv4 addresses?

- ✅ EIP is persistent
- ⚪ EIP is dynamic
- ⚪ EIP is private
- ✅ EIP can be reassigned
Explanation:-An Elastic IP address is a static, public IPv4 address designed for dynamic cloud computing. You can associate an Elastic IP address with any instance or network interface for any VPC in your account. With an Elastic IP address, you can mask the failure of an instance by rapidly remapping the address to another instance in your VPC. Note that the advantage of associating the Elastic IP address with the network interface instead of directly with the instance is that you can move all the attributes of the network interface from one instance to another in a single step. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/vpc-eips.html
- ⚪ EIP is public and private

Q16) What AWS services are globally managed? (Select four)

- ⚪ DynamoDB
- ✅ Route 53
- ✅ CloudFront
- ⚪ S3
- ✅ IAM
- ✅ WAF

Q17) What methods are available for creating a VPC? (Select three)

- ✅ VPC console
- ✅ VPC wizard
- ⚪ AWS marketplace
- ✅ AWS management console
- ⚪ Direct Connect

Q18) While launching an RDS DB instance, on which page I can select the Availability Zone?

- ✅ ADDITIONAL CONFIGURATION
- ⬤ MANAGEMENT OPTIONS
- ⬤ DB INSTANCE DETAILS
- ⬤ REVIEW

Q19) What is the purpose of a local route within a VPC route table?

- ⬤ Default route for communicating between private and public subnets
- ✅ Used to communicate between instances within the same subnet

Explanation:-Every route table contains a local route for communication within the VPC. This route is added by default to all route tables. If your VPC has more than one IPv4 CIDR block, your route tables contain a local route for each IPv4 CIDR block. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/VPC_Route_Tables.html

- ⬤ Communicate between instances within the same subnet or different subnets
- ⬤ Local route is derived from the default VPC CIDR block 10.0.0.0/16
- ⬤ Only installed in the main route table

Q20) What is the default behavior when adding a new subnet to your VPC? (Select two)

- ⬤ New subnet is assigned to the default subnet
- ⬤ New subnet is associated with any selected route table
- ⬤ New subnet is associated with the custom route table
- ✅ New subnet is associated with the main route table

Explanation:-You can use a default VPC as you would use any other VPC:
Add additional nondefault subnets.
Modify the main route table.
Add additional route tables.
Associate additional security groups.
Update the rules of the default security group.
Add AWS Site-to-Site VPN connections.
Add more IPv4 CIDR blocks.
Refer: https://docs.aws.amazon.com/vpc/latest/userguide/default-vpc.html#create-default-subnet

- ✅ New subnet is assigned from the VPC CIDR block

Q21) You have enabled Amazon RDS database services in VPC1 for an application that has public webservers in VPC2. How do you connect the web servers to the RDS database instance so they can communicate considering the VPC's are in the same region?

- ✅ VPC peering
- ⬤ AWS Network Load Balancer

Explanation:-
AWS Network Load Balancer (NLB) is an Amazon Web Services (AWS) tool that distributes end user traffic across multiple cloud resources to ensure low latency and high throughput for applications. ... When a target becomes slow or unavailable, the Network Load Balancer routes traffic to another target. Refer: https://aws.amazon.com/elasticloadbalancing/features/

- ⬤ Path-based routing
- ⬤ VPN gateway
- ⬤ VPC endpoints

Q22) What does specifying the mapping /dev/sdc=none when launching an instance do?

- ✅ Prevents /dev/sdc from attaching to the instance.
- ⬤ Set the value of /dev/sdc to 'zero'.
- ⬤ Prevents /dev/sdc from deleting the instance.
- ⬤ Prevents /dev/sdc from creating the instance.

Q23) What configuration settings are required from the remote VPC in order to create cross-account peering? (Select three)

- ✅ account ID
- ⬤ account username
- ✅ VPC ID

Explanation:-You need a peer VPC ID, a peer AWS account ID, and a cross-account access role for the peering connection. Refer: https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/peer-with-vpc-in-another-account.html

- ⬤ CMK keys
- ✅ VPC CIDR block
- ⬤ volume type

Q24) What CIDR block range is supported for IPv4 addressing and subnetting within a single VPC?

- ✅ /16 to /28

Explanation:-The CIDR block of a subnet can be the same as the CIDR block for the VPC (for a single subnet in the VPC), or a subset of the CIDR block for the VPC (for multiple subnets). The allowed block size is between a /28 netmask and /16 netmask. If you create more than one subnet in a VPC, the CIDR blocks of the subnets cannot overlap.

When you create a VPC, we recommend that you specify a CIDR block (of /16 or smaller) from the private IPv4 address ranges as specified in RFC 1918 : 10.0. 0.0 - 10.255. Refer: https://docs.aws.amazon.com/vpc/latest/userguide/VPC_Subnets.html#:~:text=When%20you%20create%20a%20VPC%2C%20we%20recommend%20that%20you%20specify,0.0%20%2D%2010.255.

- ⬤ /16 to /24
- ⬤ /16 to /32
- ⬤ /16 to /20

Q25) What problem is caused by the fact that VPC peering does not permit transitive routing?

- ⬤ Routing between connected spokes through hub VPC is complex
- ✅ Increased number of peer links required

Explanation:-Refer: https://docs.aws.amazon.com/vpc/latest/peering/invalid-peering-configurations.html

- ⬤ Internet gateway is required for each VPC
- ⬤ Virtual private gateway is required
- ⬤ Additional VPC route tables to manage

Q26) What two statements correctly describes Elastic Load Balancer operation?

- ⬤ Assigned per subnet
- ✅ Assigned per Auto-Scaling group

Explanation:-Elastic Load Balancing automatically distributes incoming application traffic across multiple targets, such as Amazon EC2 instances, containers, IP addresses, and Lambda functions. It can handle the varying load of your application traffic in a single Availability Zone or across multiple Availability Zones. Elastic Load Balancing offers three types of load balancers that all feature the high availability, automatic scaling, and robust security necessary to make your applications fault tolerant. Refer: https://aws.amazon.com/elasticloadbalancing/#:~:text=Elastic%20Load%20Balancing%20automatically%20distributes,or%20across%20multiple%20Availability%20Zones.

- ⬤ Assigned per EC2 instance
- ⬤ Spans multiple regions
- ✅ No cross-region support

Q27) What is the durability of S3 RRS?

- ⬤ 0.9995
- ✅ 0.9999

Explanation:-Amazon S3 standard storage is designed to provide 99.999999999% durability and to sustain the concurrent loss of data in two facilities, while RRS is designed to provide 99.99% durability and to sustain the loss of data in a single facility. Refer: https://aws.amazon.com/about-aws/whats-new/2010/05/19/announcing-amazon-s3-reduced-redundancy-storage/#:~:text=Amazon%20S3%20standard%20storage%20is,data%20in%20a%20single%20facility.

- ⬤ 0.99995
- ⬤ 0.99999999999

Q28) What does Amazon SWF stand for?

- ⬤ Simple Wireless Forms
- ✅ Simple Work Flow

Explanation:-Amazon Simple Workflow Service (Amazon SWF) is a web service that makes it easy to coordinate work across distributed application components. Refer: https://aws.amazon.com/swf/faqs/#:~:text=Amazon%20Simple%20Workflow%20Service%20(Amazon,work%20across%20distributed%20application%20components.

- ⬤ Simple Web Flow
- ⬤ Simple Web Form

Q29) What is the maximum key length of a tag?

- ✅ 128 Unicode characters

Explanation:-The tag key must be a minimum of 1 and a maximum of 128 Unicode characters in UTF-8. Refer: https://docs.aws.amazon.com/general/latest/gr/aws_tagging.html

- ⬤ 256 Unicode characters
- ⬤ 64 Unicode characters
- ⬤ 512 Unicode characters

Q30) While performing the volume status checks, if the status is insufficient-data, what does it mean?

- ⬤ The check has passed
- ✅ The checks may still be in progress on the volume

Explanation:-Volume status checks are automated tests that run every 5 minutes and return a pass or fail status. If all checks pass, the status of the volume is ok. If a check fails, the status of the volume is impaired. If the status is insufficient-data, the checks may still be in progress on the volume. You can view the results of volume status checks to identify any impaired volumes and take any necessary actions. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/monitoring-volume-status.html

- ⬤ The check has failed

Q31) What is Oracle SQL Developer?

- ⬤ It is a variant of the SQL Server Management Studio designed by Microsoft to support Oracle DBMS functionalities
- ✅ A graphical Java tool distributed without cost by Oracle.
- ⬤ An AWS developer who is an expert in Amazon RDS using both the Oracle and SQL Server DB engines
- ⬤ A different DBMS released by Microsoft free of cost

Q32) State whether the following statement is Correct or Incorrect. "When you perform a restore operation to a point in time or from a DB Snapshot, a new DB Instance is created with a new endpoint."

- ⬤ INCORRECT
- ✅ CORRECT

Q33) _____ let you categorize your EC2 resources in different ways, for example, by purpose, owner, or environment.

- ✅ Tags

Explanation:-Tags enable you to categorize your AWS resources in different ways, for example, by purpose, owner, or environment. This is useful when you have many resources of the same type—you can quickly identify a specific resource based on the tags that you've assigned to it. This topic describes tags and shows you how to create them. Refer: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/Using_Tags.html

- ⬤ Pointers
- ⬤ Wildcards
- ⬤ Special filters

Q34) What happens to the data on an instance if the instance reboots (intentionally or unintentionally)?

- ✅ Data persists
Explanation:-If an instance reboots (intentionally or unintentionally), data in the instance store persists. ... The instance stops. The instance terminates.
Refer: If an instance reboots (intentionally or unintentionally), data in the instance store persists. The instance stops. The instance terminates.
- Data will be lost
- Data may persist however cannot be sure

Q35) Does Amazon RDS allow direct host access via Telnet, Secure Shell (SSH), or Windows Remote Desktop Connection?

- Depends on if it is in VPC or not
- ✅ No
- Yes

Q36) SQL Server _____ store logins and passwords in the master database.

- can be configured to but by default does not
- doesn't
- ✅ does

Q37) Is there a limit to how many groups a user can be in?

- No
- Yes for all users except root
- ✅ Yes for all users
- Yes unless special permission granted

Q38) IAM provides several policy templates you can use to automatically assign permissions to the groups you create. The _____ policy template gives the Admins group permission to access all account resources, except your AWS account information

- ✅ Administrator Access
Explanation:-Refer: https://docs.aws.amazon.com/IAM/latest/UserGuide/getting-started.html
- AWS Cloud Formation Read Only Access
- Read Only Access
- Power User Access

Q39) Disabling automated backups _____ disable the point-in-time recovery.

- will never
- if configured to can
- ✅ will

Q40) What does Amazon S3 stand for?

- Simple Storage Solution.
- Storage Storage Storage (triple redundancy Storage).
- Storage Server Solution.
- ✅ Simple Storage Service.
Explanation:-Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. Refer:
https://aws.amazon.com/s3/#:~:text=Amazon%20Simple%20Storage%20Service%20(Amazon,availability%2C%20security%2C%20and%20performance.

Q41) Can I move a Reserved Instance from one Region to another?

- Only if they are moving into GovCloud
- ✅ No
- Yes
- Only if they are moving to US East from another region

Q42) Is Federated Storage Engine currently supported by Amazon RDS for MySQL?

- ✅ No
Explanation:-Federated Storage Engine is currently not supported by Amazon RDS for MySQL. Refer:
https://aws.amazon.com/rds/mysql/faqs/#:~:text=Federated%20Storage%20Engine%20is%20currently%20not%20supported%20by%20Amazon%20RDS%20for%20MySQL.
- Only for Oracle RDS instances
- Yes
- Only in VPC

Q43) What is the maximum write throughput I can provision for a single Dynamic DB table?

- ✅ Dynamic DB is designed to scale without limits, but if you go beyond 10,000 you have to contact AWS first.
Explanation:-Maximum throughput per DynamoDB table is practically unlimited. For information about the limits in place, see Limits in DynamoDB. If you want to request a limit increase, contact Amazon. Refer: https://aws.amazon.com/dynamodb/faqs/
- 100,000 write capacity units
- 1,000 write capacity units
- 10,000 write capacity units

Q44) What is the advantage of resource-based policies for cross-account access?

- Resource-based policies are easier to deploy
- Trusted account permissions are replaced
- ✅ Trusted account permissions are not replaced
Explanation:-Cross-account access with a resource-based policy has some advantages over cross-account access with a role. With a resource that is accessed through a resource-based policy, the principal still works in the trusted account and does not have to give up his or her permissions to receive the role permissions. Refer: https://docs.aws.amazon.com/IAM/latest/UserGuide/id_roles_compare-resource-policies.html
- Trusting account manages all permissions

Q45) Select three requirements for configuring a Bastion host?

- VPN
- CloudWatch logs group
- ✅ Default route
- ✅ SSH inbound permission
- ✅ EIP
- Auto-Scaling

Q46) What rule must be added to the security group assigned to a mount target instance that enables EFS access from an EC2 instance?

- ✅ Type = NFSv4,
protocol = UDP,
port = 2049,
source = remote security group id
- Type = NFS,
protocol = TCP,
port = 2049,
source = remote security group id
- Type = EC2,
protocol = EFS,
port = 2049,
source = 0.0.0.0/0
- ✅ Type = EC2,
protocol = IP,
port = 2049,
source = remote security group id

Q47) What statement correctly describes IAM architecture?

- ✅ IAM allows you to manage users, groups, and roles and their corresponding level of access to the AWS Platform.
Explanation:-To start using IAM, you must subscribe to at least one of the AWS services that is integrated with IAM. You then can create and manage users, groups, and permissions via IAM APIs, the AWS CLI, or the IAM console, which gives you a point-and-click, web-based interface. You can also use the visual editor to create policies. Refer: https://aws.amazon.com/iam/faqs/
- IAM security is defined separately per region and cross-region security enabled for an AWS account
- IAM security is globally unified across the AWS cloud for an AWS tenant account
- IAM security is defined per region for roles only on an AWS tenant account
- IAM security is unified per region and replicated based on requirements for an AWS tenant account

---

Q48) What feature is not available with AWS Trusted Advisor?

- Monitor application metrics
- ✅ Vulnerability assessment
Explanation:-AWS Trusted Advisor is now available in the AWS Management Console, with an enhanced dashboard and new customization features. AWS Trusted Advisor inspects your AWS environment and makes recommendations for saving money, improving system performance and reliability, or closing security gaps. Refer: https://aws.amazon.com/about-aws/whats-new/2014/07/23/introducing-aws-trusted-advisor-console
- Infrastructure best practices
- Cost optimization

Q49) Select two features available with Amazon RDS for MySQL?

- ✅ Real-time database replication
- ✅ Read requests to standby replicas
Explanation:-Refer: https://aws.amazon.com/rds/features/read-replicas/
- Auto-Scaling
- Active read requests only

Q50) What are two characteristics of Amazon RDS?

- Database write replicas
- ✅ Native load balancer
- NoSQL queries
- ✅ Database managed service
Explanation:-Amazon RDS Features Lower administrative burden, performance, Storage, Scalability, Availability and durability, Automated backups, Security, Manageability, Cost-effectiveness. Refer: https://aws.amazon.com/rds/features/
- Automatic failover of read replica

Q51) What caching engines are supported with Amazon ElastiCache? (Select two)

✅ Memcached
✅ Redis

Explanation:-Amazon ElastiCache supports two major open source in-memory caching engines: Memcached and Redis. ElastiCache users typically select between the two caching engines, depending on the design of the corresponding application.
- RedShift
- Route 53
- HAProxy
- CloudFront

Q52) What are three primary characteristics of DynamoDB?

✅ Replication to three Availability Zones
✅ Store metadata for S3 objects
- Static content
- Less scalable than RDS
✅ High read/write throughput