Q1)

You work for a hospital that needs to store patients' medical records for a minimum of 10 years.

Most of these records will never be accessed but must be made available upon request (within a few hours).

What is the most cost-effective storage option?

⚫ Amazon Elastic Block Store (EBS)
Explanation:-This option is not correct.

⚫ Amazon Elastic File System (EFS)
Explanation:-This option is not correct.

✅ Amazon Glacier
Explanation:-This option is correct. Amazon S3 Glacier is designed to be the lowest cost AWS object storage class, allowing you to archive large amounts of data at a very low cost. All other options are not correct. Amazon Glacier is the cheapest storage option.
Please note that it is not just the price that determines which storage service to use, each of the storage options mentioned has its own use case. For example, Amazon EFS can provide massively parallel shared access to thousands of Amazon EC2.

⚫ Amazon Simple Storage Service (S3)
Explanation:-This option is not correct.

Q2)

An external auditor requests a log of all accesses to the AWS resources in the company's account.

Which of the following services provides such information?

⚫ AWS EC2
Explanation:-This option is not correct. AWS EC2 is a compute service.

⚫ AWS SNS
Explanation:-This option is not correct. AWS SNS is a pub/sub messaging service that enables you to decouple microservices, distributed systems, and serverless applications.

⚫ AWS Cloudwatch
Explanation:-This option is not correct. Amazon CloudWatch is used to monitor the utilization of the AWS cloud resources (such as Amazon EC2 instances, Amazon DynamoDB tables, and Amazon RDS DB instances) , as well as custom metrics generated by your applications and services.

✅ AWS Cloudtrail
Explanation:-This option is correct. AWS CloudTrail is a service that enables governance, compliance, operational auditing, and risk auditing of your AWS account. With CloudTrail, you can log, continuously monitor, and retain account activity related to actions across your AWS infrastructure. CloudTrail provides event history of your AWS account activity, including actions taken through the AWS Management Console, AWS SDKs, command line tools, and other AWS services. This event history simplifies security.

Q3) Which of the following AWS support plans gives you access to a "Well-Architected Review" delivered by AWS Solution Architects?

⚫ Business
Explanation:-This option is incorrect.

⚫ Developer
Explanation:-This option is incorrect.

⚫ Basic
Explanation:-This option is incorrect.

✅ Enterprise
Explanation:-This option is correct. The only plan that gives you access to a "Well-Architected Review" delivered by AWS Solution Architects is the Enterprise support plan.

Q4) What does the "Server Side Encryption" option in Amazon S3 provide?

⚫ It allows to upload encrypted files using an SSL endpoint.
Explanation:-This option is not correct. Uploading encrypted files to Amazon S3 is called "Client-Side Encryption".

⚫ It doesn't exist for Amazon S3, only for Amazon EBS.
Explanation:-This option is not correct. Server Side Encryption is available for both EBS and S3.

⚫ It automatically encrypts all files as they are uploaded to S3.
Explanation:-This option is not correct. The encryption is not performed automatically, you have to request it.

✅ It encrypts the files that you send to Amazon S3, on the server side.
Explanation:-This option is correct. Server-side encryption is about protecting data at rest. Server-side encryption with Amazon S3-managed encryption keys (SSE-S3) employs strong multi-factor encryption. Amazon S3 encrypts each object with a unique key. As an additional safeguard, it encrypts the key itself with a master key that it regularly rotates. Amazon S3 server-side encryption uses one of the strongest block ciphers available, 256-bit Advanced Encryption Standard (AES-256), to encrypt your data.

Q5) What can you do to best make your application on AWS highly available?

✅ Deploy to at least two Availability Zones
Explanation:-This option is correct. Each AWS Region contains multiple distinct locations, or Availability Zones. Each Availability Zone is engineered to be independent from failures in other Availability Zones. Deploying your application to multiple Availability Zones will increase the availability of your application. If one availability zone encounters an issue, the other availability zones can still serve your application.

⚫ Use AWS Direct Connect
Explanation:-This option is not correct. AWS Direct Connect is a cloud service solution that makes it easy to establish a dedicated network

connection from your premises to AWS.

○ Use more AWS servers

Explanation:-This option is not correct. Using more AWS servers may not help your application to be highly available because it is not specified whether these servers provisioned in multiple availability zones or in the same availability zone.

○ Rewrite the application code to handle all incoming requests

Explanation:-This option is not correct. There is no relation between your application code and "high availability". Even perfectly written code that never crashes will become unavailable if the infrastructure it runs on fails.

Q6) Which DynamoDB feature can be used to reduce the latency of requests to a database from milliseconds to microseconds?

○ Memcached

✅ DAX

Explanation:-Amazon DynamoDB Accelerator (DAX) is a fully managed, highly available, in-memory cache for DynamoDB that delivers performance improvements from milliseconds to microseconds – even at millions of requests per second. DAX adds in-memory acceleration to your DynamoDB tables without requiring you to manage cache invalidation, data population, or cluster management.

○ Multi-AZ

○ Read Replica

Q7) Amazon RDS supports multiple database engines to choose from. Which of the following is not one of them?

○ Oracle

✅ Teradata

Explanation:-Amazon Relational Database Service (Amazon RDS) is a managed service that makes it easy to set up, operate, and scale a relational database in the cloud. Amazon RDS is available on several database instance types - optimized for memory, performance or I/O - and provides you with six familiar database engines to choose from, including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle, and Microsoft SQL Server.

○ PostgreSQL

○ Microsoft SQL Server

Q8) You have a real-time IoT application that requires sub-millisecond latency. Which of the following services would you use?

○ Amazon Redshift

✅ Amazon ElastiCache for Redis

Explanation:-Amazon ElastiCache for Redis is a blazing fast in-memory data store that provides sub-millisecond latency to power internet-scale real-time applications. Built on open-source Redis and compatible with the Redis APIs, ElastiCache for Redis works with your Redis clients and uses the open Redis data format to store your data. Your self-managed Redis applications can work seamlessly with ElastiCache for Redis without any code changes. ElastiCache for Redis combines the speed, simplicity, and versatility of open-source Redis with manageability, security, and scalability from Amazon to power the most demanding real-time applications in Gaming, Ad-Tech, E-Commerce, Healthcare, Financial Services, and IoT.

○ AWS Cloud9

○ Amazon Athena

Q9) An organization needs to build a financial application that requires support for ACID transactions. Which AWS database service is most appropriate in this case?

○ CloudHSM

○ DMS

✅ RDS

Explanation:-In computer science, ACID (Atomicity, Consistency, Isolation, and Durability) is a set of properties of database transactions intended to guarantee validity even in the event of errors, power failures, etc. Amazon RDS is a fully-managed relational database service. It is a highly available and highly consistent database that supports ACID transactions. Basically, a transaction is one or more add, update, delete, or modify change to the database that must all be completed successfully or none of the steps should be executed. Transactional databases are useful when data integrity is important. If one of the steps in the transaction fail, then the steps must be rolled back to the state before any change was made to the database. An example of when you would need a transaction is when you make a banking transaction to move money from one account to another. If you successfully remove money from account A, but fail to add money to account B, then the transaction fails and the transaction must be rolled back so that the money is not taken from account A.

○ RedShift

Q10) Which AWS service allows you to build a data warehouse in the cloud?

○ AWS Shield

○ Amazon RDS

✅ Amazon Redshift

Explanation:-Amazon Redshift is a fully managed, petabyte-scale data warehouse service in the cloud. You can start with just a few hundred gigabytes of data and scale to a petabyte or more. This enables you to use your data to acquire new insights for your business and customers.

○ Amazon EFS

Q11) Which database should you use if your application requires joins or complex transactions?

○ Amazon DynamoDB

✅ Amazon RDS

Explanation:-If your database's schema cannot be denormalized, and your application requires joins or complex transactions, consider using a relational database such as Amazon RDS.

○ Amazon ElastiCache

○ Amazon DocumentDB

Q12) What does Amazon ElastiCache provide? (Choose two)

- Provides a Chef-compatible cache to speed up applications' response
- Reduces delivery costs using Edge Locations
- ✅ Provides an in-memory data store service

Explanation:-Amazon ElastiCache improves the performance of web applications by allowing you to retrieve information from a fast, managed, in-memory data store, instead of relying entirely on slower disk-based databases. Querying a database is always slower and more expensive than locating a copy of that data in a cache. By caching (storing) common database query results, you can quickly retrieve the data multiple times without having to re-execute the query.

- ✅ Improves web applications' performance

Explanation:-Amazon ElastiCache improves the performance of web applications by allowing you to retrieve information from a fast, managed, in-memory data store, instead of relying entirely on slower disk-based databases. Querying a database is always slower and more expensive than locating a copy of that data in a cache. By caching (storing) common database query results, you can quickly retrieve the data multiple times without having to re-execute the query.

- Distributes requests to multiple instances

Q13) If you want to run an ever-changing database in an Amazon EC2 Instance, what is the most recommended Amazon storage option?

- Amazon DynamoDB
- ✅ Amazon EBS

Explanation:-Amazon EBS provides durable, block-level storage volumes that you can attach to a running instance. You can use Amazon EBS as a primary storage device for data that requires frequent and granular updates. Amazon EBS is the recommended storage option when you run a database on an instance.

- You can't run a database inside an Amazon EC2 instance
- Amazon RDS

Q14) You want to run a questionnaire application for only one day (without interruption), which Amazon EC2 purchase option should you use?

- Spot instances
- Dedicated instances
- Reserved instances
- ✅ On-demand instances

Explanation:-With On-Demand instances, you pay for compute capacity by the hour with no long-term commitments. You can increase or decrease your compute capacity depending on the demands of your application and only pay the specified hourly rate for the instances you use. The use of On-Demand instances frees you from the costs and complexities of planning, purchasing, and maintaining hardware and transforms what are commonly large fixed costs into much smaller variable costs. On-Demand instances also remove the need to buy "safety net" capacity to handle periodic traffic spikes.

Q15)

You are working on a project that involves creating thumbnails of millions of images; however, consistent uptime is not really an issue, and continuous processing is not required.

Which type of EC2 buying option would be the most cost-effective?

- Reserved Instances
- On-demand Instances
- Dedicated Instances
- ✅ Spot Instances

Explanation:-Spot instances provide a discount (up to 90%) off the On-Demand price. The Spot price is determined by long-term trends in supply and demand for EC2 spare capacity. If the Spot price exceeds the maximum price you specify for a given instance or if capacity is no longer available, your instance will automatically be interrupted.

Spot Instances are a cost-effective choice if you can be flexible about when your applications run and if you don't mind if your applications get interrupted. For example, Spot Instances are well-suited for data analysis, batch jobs, background processing, and optional tasks.

Q16) Which of the following is NOT correct regarding Amazon EC2 On-demand instances?

- The on-demand instances follow the AWS pay-as-you-go pricing model
- When using on-demand instances, you are charged per second based on an hourly rate
- ✅ You have to pay a start-up fee when launching a new instance for the first time

Explanation:-There are no startup or termination fees associated with Amazon EC2.

- With on-demand instances, no longer-term commitments or upfront payments are needed

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Q17) A company is planning to use a number of Amazon EC2 instances for at least one year. Which payment model does AWS make available to reduce their overall EC2 costs?

- Pay less by using more
- Pay as you go
- Pay less as AWS grows
- ✅ Save when you reserve

Explanation:-For Customers that can commit to using EC2 over a 1 or 3-year term, it is better to purchase EC2 Reserved Instances. Reserved Instances provide a significant discount (up to 75%) compared to On-Demand instance pricing.

Q18) Which of the following EC2 instance purchasing options supports the Bring Your Own License (BYOL) model for almost every BYOL scenario?

- ● Reserved Instances
- ● Dedicated Instances
- ✅ Dedicated Hosts

Explanation:-You have a variety of options for using new and existing Microsoft software licenses on the AWS Cloud. By purchasing Amazon Elastic Compute Cloud (Amazon EC2) or Amazon Relational Database Service (Amazon RDS) license-included instances, you get new, fully compliant Windows Server and SQL Server licenses from AWS. The BYOL model enables AWS customers to use their existing server-bound software licenses, including Windows Server, SQL Server, and SUSE Linux Enterprise Server.

Your existing licenses may be used on AWS with Amazon EC2 Dedicated Hosts, Amazon EC2 Dedicated Instances or EC2 instances with default tenancy using Microsoft License Mobility through Software Assurance.

Dedicated Hosts provide additional control over your instances and visibility into Host level resources and tooling that allows you to manage software that consumes licenses on a per-core or per-socket basis, such as Windows Server and SQL Server. This is why most BYOL scenarios are supported through the use of Dedicated Hosts, while only certain scenarios are supported by Dedicated Instances.

- ● On-demand Instances

Q19) Which of the following reserved instance payment option result in you paying a discounted hourly rate throughout the duration of the term? (Choose two)

- ✅ No Upfront option

Explanation:-You can choose between three payment options when you purchase a Standard or Convertible Reserved Instance:

1- No Upfront:

No upfront payment is required. You are billed a discounted hourly rate for every hour within the term, regardless of whether the Reserved Instance is being used. No Upfront Reserved Instances are based on a contractual obligation to pay monthly for the entire term of the reservation. A successful billing history is required before you can purchase No Upfront Reserved Instances.

2- Partial Upfront:

A portion of the cost must be paid up front and the remaining hours in the term are billed at a discounted hourly rate, regardless of whether youâ€™re using the Reserved Instance.

3- All Upfront:

With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. This option provides you with the largest discount compared to On-Demand instance pricing.

Hence, the correct answers are No Upfront and Partial Upfront.

- ● Spot
- ✅ Partial Upfront option

Explanation:-You can choose between three payment options when you purchase a Standard or Convertible Reserved Instance:

1- No Upfront:

No upfront payment is required. You are billed a discounted hourly rate for every hour within the term, regardless of whether the Reserved Instance is being used. No Upfront Reserved Instances are based on a contractual obligation to pay monthly for the entire term of the reservation. A successful billing history is required before you can purchase No Upfront Reserved Instances.

2- Partial Upfront:

A portion of the cost must be paid up front and the remaining hours in the term are billed at a discounted hourly rate, regardless of whether youâ€™re using the Reserved Instance.

3- All Upfront:

With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. This option provides you with the largest discount compared to On-Demand instance pricing.

Hence, the correct answers are No Upfront and Partial Upfront.

- ● All Upfront option
- ● Dedicated Hosts

Q20) A company needs to host a database in Amazon RDS for at least three years. Which of the following options would be the most cost-effective solution?

- ● Spot Instances
- ✅ Reserved instances - Partial Upfront

Explanation:-Since the database server will be hosted for a period of at least three years, then it is better to use the RDS Reserved Instances as it provides you with a significant discount compared to the On-Demand Instance pricing for the DB instance.

With the Partial Upfront option, you make a low upfront payment and are then charged a discounted hourly rate for the instance for the duration of the Reserved Instance term. The Partial Upfront option is more cost-effective than the No upfront option (The more you spend upfront the more you save).

- ● Reserved instances - No Upfront
- ● On-Demand instances

Q21) What is the most cost-effective purchasing option for running a set of EC2 instances that must always be available for a period of two months?

- ● Reserved Instances - All Upfront
- ● Spot Instances
- ● Reserved Instances - No Upfront
- ✅ On-Demand Instances

Explanation:-The most cost-effective option for this scenario is to use On-Demand Instances.

Q22) What is one benefit and one drawback of buying a reserved EC2 instance? (Select TWO)

- ✅ Reserved instances provide a significant discount compared to on-demand instances

Explanation:-Amazon EC2 Reserved Instances (RI) provide a significant discount (up to 75%) compared to On-Demand pricing. Reserved instances can be purchased for a 1-year or 3-year term so you are committing to pay for them throughout this time period even if you don't use them.

- ● Instances can be shut down by AWS at any time with no notification
- ✅ Reserved instances require at least a one-year pricing commitment

Explanation:-Amazon EC2 Reserved Instances (RI) provide a significant discount (up to 75%) compared to On-Demand pricing. Reserved instances can be purchased for a 1-year or 3-year term so you are committing to pay for them throughout this time period even if you don't use them.

- Reserved instances are best suited for periodic workloads
- There is no additional charge for using dedicated instances

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Q23) A company needs to migrate their website from on-premises to AWS. Security is a major concern for them, so they need to host their website on hardware that is NOT shared with other AWS customers. Which of the following EC2 instance options meets this requirement?

- Reserved instances
- ✅ Dedicated instances

Explanation:-Dedicated Instances are Amazon EC2 instances that run in a virtual private cloud (VPC) on hardware that's dedicated to a single customer. Dedicated Instances that belong to different AWS accounts are physically isolated at the hardware level. In addition, Dedicated Instances that belong to AWS accounts that are linked to a single payer account are also physically isolated at the hardware level. However, Dedicated Instances may share hardware with other instances from the same AWS account that are not Dedicated Instances.

- On-demand instances
- Spot instances

Q24)

A company has developed a media transcoding application in AWS. The application is designed to recover quickly from hardware failures.

Which one of the following types of instance would be the most cost-effective choice to use?

- Reserved instances
- On-Demand instances
- ✅ Spot Instances

Explanation:-The question stated that the application is designed to recover quickly from failures, therefore it can handle any interruption may occur with the instance. Hence, we can use the Spot instances for this application. Spot instances provide a discount (up to 90%) off the On-Demand price.

The Spot price is determined by long-term trends in supply and demand for EC2 spare capacity. If the Spot price exceeds the maximum price you specify for a given instance or if capacity is no longer available, your instance will automatically be interrupted.

Spot Instances are the most cost-effective choice if you are flexible about when your applications run and if your applications can be interrupted. For example, Spot Instances are well-suited for data analysis, batch jobs, background processing, and optional tasks.

- Dedicated instances

Q25)

A company is migrating a web application to AWS. The application's compute capacity is continually utilized throughout the year.

Which of the below options offers the company the most cost-effective solution?

- On-demand Instances
- ✅ Reserved Instances

Explanation:-Amazon EC2 Reserved Instances provide a significant discount compared to On-Demand pricing for customers that can commit to using EC2 over a 1- or 3-year term to reduce their total computing costs. Depending on the term of commitment and the amount paid up-front, discounts as high as 75% can be attained vs. On-Demand pricing.

- Spot Instances
- Dedicated Hosts

Q26)

An AWS customer has used one Amazon Linux instance for 2 hours, 5 minutes and 9 seconds, and one Windows instance for 4 hours, 23 minutes and 7 seconds.

How much time will the customer be billed for?

- 3 hours for the Linux instance and 5 hours for the Windows instance
- 3 hours for the Linux instance and 4 hours, 23 minutes and 7 seconds for the Windows instance
- ✅ 2 hours, 5 minutes and 9 seconds for the Linux instance and 5 hours for the Windows instance

Explanation:-With per-second billing in EC2 you pay for only what you use. It takes cost of unused minutes and seconds in an hour off of the bill, so you can focus on improving your applications instead of maximizing usage to the hour.

Per-second billing is available for instances launched in Amazon Linux or Ubuntu.

For other instances, including Windows, each partial instance-hour consumed will be billed as a full hour.

In this case, the customer will be charged for 2 hours, 5 minutes and 9 seconds for the Linux instance, and 5 hours for the Windows instance.

- 2 hours, 5 minutes and 9 seconds for the Linux instance and 4 hours, 23 minutes and 7 seconds for the Windows instance

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Q27) You decide to buy a reserved instance for a term of one year. Which option provides the largest total discount?

- No up-front reservation
- All reserved instance payment options provide the same discount level
- ✅ All up-front reservation

Explanation:-There are three payment options available when purchasing reserved instances:

1- No up-front
2- Partial up-front
3- All up-front.
The general rule is: "the more you spend upfront, the more discounts you get."
With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. This option provides you with the largest discount compared to On-Demand instance pricing.

● Partial up-front reservation

Q28)

A company's AWS workflow requires that it periodically perform large-scale image and video processing jobs. The customer is seeking to minimize cost and has stated that the amount of time it takes to process these jobs is not critical, but that cost minimization is the most important factor in designing the solution.

Which EC2 instance class is best suited for this processing?

● EC2 On-Demand Instances
● EC2 Reserved Instances - No Upfront
✅ EC2 Spot Instances
Explanation:-A Spot Instance is an unused EC2 instance that is available for less than the On-Demand price. Because Spot Instances enable customers to request unused EC2 instances at steep discounts, customers can lower their Amazon EC2 costs significantly. Spot Instances run whenever capacity is available, and the maximum price per hour for the request exceeds the Spot price. The risk with Spot instances is that a running instance can be interrupted due to changes in demand and pricing for a specific class of Spot instances, as there is no guarantee of availability at any time. Spot Instances are well-suited for data analysis, batch jobs, background processing, and optional tasks, as well as for workloads that are not time critical.
● EC2 Reserved Instances - All Upfront

Q29) One of the major advantages of using AWS is cost savings. Which of the below options is an example of the cost savings offered by AWS?

● Low-cost instance tagging
● Low instance start-up fees
● Low monthly instance maintenance costs
✅ Per-second instance billing
Explanation:-With per-second billing, customers pay for only what they use. It takes the cost of unused minutes and seconds in an hour off of the bill, so they can focus on improving their applications instead of maximizing usage to the hour. Especially, if a customer manages instances running for irregular periods of time, such as dev/testing, data processing, analytics, batch processing, and gaming applications, can benefit.
EC2 usage is billed on one-second increments, with a minimum of 60 seconds. Similarly, provisioned storage for EBS volumes will be billed per-second increments, with a 60 second minimum. Per-second billing also applies to several other AWS services, including Amazon RDS, Amazon EMR, and AWS Batch.

Q30) Who from the following will get the largest discount?

● A user who chooses to buy Reserved, Convertible, All upfront instances
✅ A user who chooses to buy Reserved, Standard, All upfront instances
Explanation:-Reserved instance types include:
- Standard RIs: These provide the most significant discount (up to 75% off On-Demand) and are best suited for steady-state usage.
- Convertible RIs: These provide a discount (up to 54% off On-Demand) and the capability to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value.
Therefore, Standard RIs provides more discounts than Convertible RIs.
You can choose between three payment options when you purchase a Standard or Convertible Reserved Instance. With the All Upfront option, you pay for the entire Reserved Instance term with one upfront payment. With the Partial Upfront option, you make a low upfront payment and are then charged a discounted hourly rate for the instance for the duration of the Reserved Instance term. The No Upfront option does not require any upfront payment and provides a discounted hourly rate for the duration of the term.
* Remember that when you buy Reserved Instances, the larger the upfront payment, the greater the discount.
- The All Upfront option provides you with the largest discount.
- The Partial Upfront option provides fewer discounts than All Upfront.
- The No Upfront option provides you with the least discount.
● A user who chooses to buy On-demand, Convertible, Partial upfront instances
● A user who chooses to buy Reserved, Standard, No upfront instances

Q31) Which of the following has the greatest impact on cost? (Choose two)

● Number of running services
● Data Transfer In
● IAM roles
✅ Data Transfer Out
Explanation:-The factors that have the greatest impact on cost include: Compute, Storage and Data Transfer Out. Their pricing differs according to the service you use.
✅ Compute
Explanation:-The factors that have the greatest impact on cost include: Compute, Storage and Data Transfer Out. Their pricing differs according to the service you use.

Q32) What purchasing option does AWS make available so you pay lower prices for compute resources?

● The ability to pay lower hourly costs when using more compute capacity
● The ability to buy Dedicated Instances for up to 90% discount
✅ The ability to pay upfront to get lower hourly costs
Explanation:-With Reserved Instances, you can save up to 75% over equivalent on-demand capacity. When you buy Reserved Instances, the larger the upfront payment, the greater the discount.
● The ability to bid to get the lowest possible prices when purchasing compute instances

Q33) Which of the following are Amazon EC2 reserved instances types? (Select two)

✅ Standard

Explanation:-There are three types of EC2 reserved instances(RIs) that you can choose from based on your applications needs:

1- Standard RIs: These provide the most significant discount (up to 75% off On-Demand) and are best suited for steady-state usage.

2- Convertible RIs: These provide a discount (up to 54% off On-Demand) and the capability to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value. Like Standard RIs, Convertible RIs are best suited for steady-state usage.

3- Scheduled RIs: These are available to launch within the time windows you reserve. This option allows you to match your capacity reservation to a predictable recurring schedule that only requires a fraction of a day, a week, or a month.

✅ Convertible

Explanation:-There are three types of EC2 reserved instances(RIs) that you can choose from based on your applications needs:

1- Standard RIs: These provide the most significant discount (up to 75% off On-Demand) and are best suited for steady-state usage.

2- Convertible RIs: These provide a discount (up to 54% off On-Demand) and the capability to change the attributes of the RI as long as the exchange results in the creation of Reserved Instances of equal or greater value. Like Standard RIs, Convertible RIs are best suited for steady-state usage.

3- Scheduled RIs: These are available to launch within the time windows you reserve. This option allows you to match your capacity reservation to a predictable recurring schedule that only requires a fraction of a day, a week, or a month.

⚪ Expedited

⚪ Bulk

⚪ Spot

Q34) Which of the following is not an AWS reservation model?

⚪ DynamoDB Reserved Capacity

✅ S3 Reserved Capacity

Explanation:-There are no reservations in S3. You pay for what you use.

While the cloud is well-suited for running variable workloads and rapid deployments, many cloud-based workloads display a more predictable pattern. For these stable applications, organizations can achieve significant cost savings by taking advantage of the available reservation models such as EC2 reserved instances, RDS reserved instances, ElastiCache Reserved Nodes, DynamoDB Reserved Capacity and Redshift Reserved Nodes.

⚪ ElastiCache Reserved Nodes

⚪ Redshift Reserved Nodes

Q35) For compliance and regulatory purposes, a government agency requires that their applications must run on hardware that's dedicated to them only. How can you meet this requirement?

⚪ Use EC2 Spot Instances

⚪ Use EC2 On-demand Instances

✅ Use EC2 Dedicated Hosts

Explanation:-When you launch instances on a Dedicated Host, the instances run on a physical server that is dedicated for your use. While Dedicated instances also run on dedicated hardware, Dedicated Hosts provide further visibility and control by allowing you to place your instances on a specific, physical server. This enables you to deploy instances using configurations that help address corporate compliance and regulatory requirements.

⚪ Use EC2 Reserved Instances

Q36) Which statement best describes the AWS Pay-As-You-Go pricing model?

⚪ With AWS, you replace large upfront expenses with low fixed payments

✅ With AWS, you replace large capital expenses with low variable payments

Explanation:-AWS does not require minimum spend commitments or long-term contracts. You replace large fixed upfront expenses with low variable payments that only apply based on what you use. For example, when using On-demand instances you pay only for the hours\seconds they are running and nothing more.

⚪ With AWS, you replace low upfront expenses with large fixed payments

⚪ With AWS, you replace low upfront expenses with large variable payments

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Q37) What are the access time options provided by Amazon Glacier that keep costs low yet suitable for varying retrieval needs? (Choose two)

✅ Bulk

Explanation:-To keep costs low yet suitable for varying retrieval needs, Amazon Glacier provides three options for access to archives that span a few minutes to several hours: (Access option : Data access time)

1- Expedited : 1–5 minutes

2- Standard : 3–5 hours

3- Bulk : 5–12 hours

✅ Expedited

Explanation:-To keep costs low yet suitable for varying retrieval needs, Amazon Glacier provides three options for access to archives that span a few minutes to several hours: (Access option : Data access time)

1- Expedited : 1–5 minutes

2- Standard : 3–5 hours

3- Bulk : 5–12 hours

⚪ Rapid

⚪ Enterprise

⚪ Medium

Q38) Which statement is true in relation to AWS pricing? (Choose two)

✅ With AWS, you don't have to pay any money upfront

Explanation:-AWS provides three pricing models:

1- Pay-as-you-go

2- Save when you reserve

3- Pay less by using more

With the AWS pay-as-you-go model, you only pay for what you consume, you don't have to pay any money upfront and there are no long term contracts. AWS pricing is similar to how you pay for utilities like water and electricity. You only pay for the services you consume, and once you stop using them, there are no additional costs or termination fees.

- ⚪ There are no reservations on AWS, you only pay for what you use
- ✅ You only pay for the individual services that you need with no long term contracts

Explanation:-AWS provides three pricing models:

1- Pay-as-you-go

2- Save when you reserve

3- Pay less by using more

With the AWS pay-as-you-go model, you only pay for what you consume, you don't have to pay any money upfront and there are no long term contracts. AWS pricing is similar to how you pay for utilities like water and electricity. You only pay for the services you consume, and once you stop using them, there are no additional costs or termination fees.

- ⚪ You are responsible for buying a license for any software not developed by AWS
- ⚪ For some services, you have to pay a startup fee in order to get the service running

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Q39) You are planning to launch an advertising campaign over the coming weekend to promote a new digital product. It is expected that there will be heavy spikes in load during the campaign period. You need additional compute resources to handle the additional load. What is the most cost-effective EC2 instance purchasing option for this job?

- ⚪ Reserved Instances
- ✅ On-Demand Instances

Explanation:-On Demand instances would help provision any extra capacity that the application may need without any interruptions.

- ⚪ Dedicated Instances
- ⚪ Spot Instances

Q40) What are the benefits of using on-demand EC2 instances? (Choose two)

- ⚪ They provide free capacity when testing your new applications
- ⚪ They are the cheapest buying option
- ⚪ They require only 1-2 days for setup and configuration
- ✅ You can increase or decrease your compute capacity depending on the demands of your application

Explanation:-With On-Demand instances, you pay for compute capacity by the hour with no long-term commitments. You can increase or decrease your compute capacity depending on the demands of your application and only pay the specified hourly rate for the instances you use. The use of On-Demand instances frees you from the costs and complexities of planning, purchasing, and maintaining hardware and transforms what are commonly large fixed costs into much smaller variable costs. On-Demand instances also remove the need to buy "safety net" capacity to handle periodic traffic spikes.

- ✅ They remove the need to buy "safety net" capacity to handle periodic traffic spikes

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Q41) Which Amazon EC2 Reserved Instance type is ideal for an application that runs 3 hours a day, 5 days a week?

- ⚪ Standard RIs
- ⚪ Convertible RIs
- ✅ Scheduled RIs

Explanation:-Scheduled RIs are available to launch within the time windows you reserve. This option allows you to match your capacity reservation to a predictable recurring schedule that only requires a fraction of a day, a week, or a month.

- ⚪ On-demand RIs

Q42) What are the connectivity options that can be used to build hybrid cloud architectures? (Choose two)

- ⚪ AWS Cloud9
- ⚪ AWS Artifact
- ⚪ AWS CloudTrail
- ✅ AWS VPN

Explanation:-In cloud computing, hybrid cloud refers to the use of both on-premises resources in addition to public cloud resources. A hybrid cloud enables an organization to migrate applications and data to the cloud, extend their datacenter capacity, utilize new cloud-native capabilities, move applications closer to customers, and create a backup and disaster recovery solution with cost-effective high availability. By working closely with enterprises, AWS has developed the industry's broadest set of hybrid capabilities across storage, networking, security, application deployment, and management tools to make it easy for you to integrate the cloud as a seamless and secure extension of your existing investments.

AWS Virtual Private Network (AWS VPN) provides an internet-based Site-to-Site connection that enables you to securely connect your on-premises network or branch office site to your Amazon Virtual Private Cloud (Amazon VPC). A VPC VPN Connection utilizes IPSec to establish encrypted connectivity between your network and Amazon VPC over the Internet. VPN Connections can be configured in minutes and are a good solution if you have an immediate need, have low to modest bandwidth requirements, and can tolerate the inherent variability in Internet-based connectivity.

AWS Direct Connect does not involve the Internet; instead, it uses dedicated, private network connections between your on-premises network or branch office site and Amazon VPC. AWS Direct Connect is a network service that provides an alternative to using the Internet to connect customer's on-premise sites to AWS. Using AWS Direct Connect, data that would have previously been transported over the Internet can now be delivered through a private network connection between AWS and your datacenter or corporate network. Companies of all sizes use AWS Direct Connect to establish private connectivity between AWS and datacenters, offices, or colocation environments. Compared to AWS VPN (Internet-based connection), AWS Direct Connect can reduce network costs, increase bandwidth throughput, and provide a more consistent network experience.

Additional information:

Besides the connectivity options that AWS provides, AWS provides many features to support building more efficient hybrid cloud architectures. For example, AWS Identity and Access Management (IAM) can grant your employees and applications access to the AWS Management Console and AWS service APIs using your existing corporate identity systems. AWS IAM supports federation from corporate systems like Microsoft Active Directory, as well as external Web Identity Providers like Google and Facebook.

✅ AWS Direct Connect

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Q43) Which of the following AWS security features is associated with an EC2 instance and functions to filter incoming traffic requests?

✅ Security Groups

Explanation:-Security Groups act as a firewall for associated Amazon EC2 instances, controlling both inbound and outbound traffic at the instance level.

⚪ AWS X-Ray

⚪ AWS IAM

⚪ NACL

Q44) Which AWS Service can be used to establish a dedicated, private network connection between AWS and your datacenter?

⚪ AWS Snowball

✅ AWS Direct Connect

Explanation:-AWS Direct Connect is used to establish a dedicated network connection from your premises to AWS. Using AWS Direct Connect, you can establish private connectivity between AWS and your data center, office, or co-location environment, which in many cases can reduce your network costs, increase bandwidth throughput, and provide a more consistent network experience than Internet-based connections.

⚪ Amazon CloudFront

⚪ Amazon Route 53

Q45) Which AWS service uses Edge Locations to cache content?

⚪ AWS KMS

✅ Amazon CloudFront

Explanation:-Amazon CloudFront is a content caching service provided by AWS that uses Edge Locations (which are AWS data centers located all around the world) to reduce network latency when delivering content to end users.

⚪ AWS Direct Connect

⚪ Amazon Glacier

Q46) Why does every AWS Region contain multiple Availability Zones?

⚪ Multiple Availability Zones within a region increases the storage capacity available in that region

✅ Multiple Availability Zones allows you to build resilient and highly available architectures

Explanation:-Resilience is the ability of an architecture to continue providing the same quality of service even if some of its resources become inaccessible. Deploying your resources across multiple Availability Zones offer you the ability to operate production applications and databases that are more resilient, highly available, and scalable than would be possible from a single data center.

⚪ Multiple Availability Zones results in lower total cost compared to deploying in a single Availability Zone

⚪ Multiple Availability Zones allows for data replication and global reach

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Q47) Which statement best describes the concept of an AWS region?

⚪ An AWS Region represents the country where the AWS infrastructure exist

✅ An AWS Region is a geographical location with a collection of Availability Zones

Explanation:-An AWS Region is a physical location in the world. Each region has multiple, isolated locations known as Availability Zones. Availability Zones consist of one or more discrete data centers, each with redundant power, networking, and connectivity. These Availability Zones offer you the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible to operate out of a single data center. Also, each AWS Region is designed to be completely isolated from the other AWS Regions. This achieves the greatest possible fault tolerance and stability.

⚪ An AWS Region is a geographical location with a collection of Edge locations

⚪ An AWS Region is a virtual network dedicated only to a single AWS customer

Q48) Which of the following is true regarding the AWS availability zones and edge locations?

⬤ Edge locations are located in separate Availability Zones worldwide to serve global customers
⬤ An Availability Zone is a geographic location where AWS provides multiple, physically separated and isolated edge locations
✅ An AWS Availability Zone is an isolated location within an AWS Region, however edge locations are located in multiple cities worldwide
Explanation:-In AWS, each Region has multiple, isolated locations known as Availability Zones. Availability Zones consist of one or more discrete data centers, each with redundant power, networking, and connectivity, housed in separate facilities.
Edge locations may or may not exist within a region. They are located in most major cities around the world. Edge locations are specifically used by CloudFront (CDN) to distribute content to global users with low latency.
⬤ An availability zone exists within an edge location to distribute content globally with low latency

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Q49) Which of the following procedures can reduce latency to your end users? (Choose two)

⬤ Reduce the size of media assets using the Amazon Elastic Transcoder
⬤ Replicate media assets to at least two availability zones
⬤ Store media assets on an additional EBS volume and increase the capacity of your server
✅ Store media assets in S3 and use CloudFront to distribute these assets
Explanation:-Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency and high transfer speeds.
CloudFront is the best solution to reduce latency if you have users from different places around the world.
Storing media assets in a region closer to the end-users can help reduce latency for those users. This is because these assets will travel a shorter distance over the network.
✅ Store media assets in the region closest to your end users
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Storing media assets in a region closer to the end-users can help reduce latency for those users. This is because these assets will travel a shorter distance over the network.

Q50) AWS provides excellent cloud-based disaster recovery services utilizing their multiple _____ .

⬤ Transportation devices
⬤ Support plans
✅ Regions
Explanation:-Businesses are using the AWS cloud to enable faster disaster recovery of their critical IT systems without incurring the infrastructure expense of a second physical site. The AWS cloud supports many popular disaster recovery (DR) architectures from "pilot light" environments that may be suitable for small customer workload data center failures to "hot standby" environments that enable rapid failover at scale. With data centers in Regions all around the world, AWS provides a set of cloud-based disaster recovery services that enable rapid recovery of your IT infrastructure and data.
⬤ Edge locations

Q51) Which of the following is a type of MFA device that customers can use to protect their AWS resources?

⬤ AWS CloudHSM
✅ U2F Security Key
Explanation:-AWS multi-factor authentication (AWS MFA) provides an extra level of security that customers can apply to their AWS environment. With MFA enabled, when a user signs in to an AWS website, they will be prompted for their user name and password (the first factor—what they know), as well as for an authentication code from their AWS MFA device (the second factor—what they have). Taken together, these multiple factors provide increased security for the AWS account resources. AWS supports several MFA device options including Virtual MFA devices, Universal 2nd Factor (U2F) security key, and Hardware MFA devices.
⬤ AWS Key Pair
⬤ AWS Access Keys

Q52) What does AWS offer to protect your data? (Choose TWO)

✅ Data encryption
Explanation:-AWS offers a lot of services and features that help you in protecting your data in the cloud. You can protect your data by encrypting it in transit and at rest. You can use Cloudtrail to log API and user activity, including who, what, and from where calls were made. You can also use the AWS Identity and Access Management (IAM) to control who can access or edit your data. You can also use advanced managed security services such as Amazon Macie, which assists in discovering and securing personal data that is stored in Amazon S3.
In brief, the customer is responsible for protecting their data in the following ways:
1- Data encryption (at rest and in transit)
2- Setting up access control
3- Monitoring user activity
4- Applying MFA
5- Using advanced managed security services such as Amazon Macie.
Additional information:
Amazon Macie uses machine learning to automatically discover, classify, and protect sensitive data in AWS. Amazon Macie recognizes sensitive data such as personally identifiable information (PII) or intellectual property, and provides you with dashboards and alerts that give visibility into how this data is being accessed or moved. The fully managed service continuously monitors data access activity for anomalies, and generates detailed alerts when it detects risk of unauthorized access or inadvertent data leaks. Today, Amazon Macie is available to protect data stored in Amazon S3, with support for additional AWS data stores coming later this year.
⬤ Unlimited storage
⬤ Physical MFA devices
⬤ Load balancing
✅ Access control
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1- Data encryption (at rest and in transit)
2- Setting up access control
3- Monitoring user activity
4- Applying MFA
5- Using advanced managed security services such as Amazon Macie.

Additional information:

Amazon Macie uses machine learning to automatically discover, classify, and protect sensitive data in AWS. Amazon Macie recognizes sensitive data such as personally identifiable information (PII) or intellectual property, and provides you with dashboards and alerts that give visibility into how this data is being accessed or moved. The fully managed service continuously monitors data access activity for anomalies, and generates detailed alerts when it detects risk of unauthorized access or inadvertent data leaks. Today, Amazon Macie is available to protect data stored in Amazon S3, with support for additional AWS data stores coming later this year.

Q53) Which AWS Service allows customers to download AWS SOC & PCI reports?

✅ AWS Artifact

Explanation:-AWS Artifact provides on-demand downloads of AWS security and compliance documents, such as AWS ISO certifications, Payment Card Industry (PCI), and Service Organization Control (SOC) reports. You can submit the security and compliance documents (also known as audit artifacts) to your auditors or regulators to demonstrate the security and compliance of the AWS infrastructure and services that you use. You can also use these documents as guidelines to evaluate your own cloud architecture and assess the effectiveness of your company's internal controls.

⚪ Amazon Chime
⚪ AWS Well-Architected Tool
⚪ AWS Glue

Q54)

You have just hired a skilled sys-admin to join your team. As usual, you have created a new IAM user for him to interact with AWS services. On his first day, you ask him to create snapshots of all existing Amazon EBS volumes and save them in a new Amazon S3 bucket.

However, the new member reports back that he is unable to create neither EBS snapshots nor S3 buckets.

What might prevent him from doing this simple task?

⚪ The systems administrator must contact AWS Support first to activate his new IAM account
⚪ EBS and S3 are accessible only to the root account owner
⚪ There is not enough space in S3 to store the snapshots
✅ There is a non-explicit deny to all new users

Explanation:-When a new IAM user is created, that user has NO access to any AWS service. This is called a non-explicit deny. For that user, access must be explicitly allowed via IAM permissions.

Q55) Which AWS Service is used to manage the keys used to encrypt customer data?

⚪ AWS Config
✅ AWS KMS

Explanation:-AWS Key Management Service (AWS KMS) is a managed service that enables customers to easily create and control the keys used for cryptographic operations. The service provides a highly available key generation, storage, management, and auditing solution for customers to encrypt or digitally sign data within their applications or to control the encryption of data across AWS services.

⚪ Multi-Factor Authentication (MFA)
⚪ Amazon Macie

Q56) A company has decided to migrate its Oracle database to AWS. Which AWS service can help achieve this without negatively impacting the functionality of the source database?

⚪ AWS Server Migration Service
⚪ AWS OpsWorks
⚪ AWS Application Discovery Service
✅ AWS Database Migration Service

Explanation:-AWS Database Migration Service (DMS) helps you migrate databases to AWS easily and securely. The source database remains fully operational during the migration, minimizing downtime to applications that rely on the database. The AWS Database Migration Service can migrate your data to and from most widely used commercial and open-source databases. The service supports homogeneous migrations such as Oracle to Oracle, as well as heterogeneous migrations between different database platforms, such as Oracle to Amazon Aurora or Microsoft SQL Server to MySQL. It also allows you to stream data to Amazon Redshift from any of the supported sources including Amazon Aurora, PostgreSQL, MySQL, MariaDB, Oracle, SAP ASE, and SQL Server, enabling consolidation and easy analysis of data in the petabyte-scale data warehouse. AWS Database Migration Service can also be used for continuous data replication with high availability.

Q57) What does AWS Snowball provide?

⚪ A hybrid cloud storage between on-premises environments and the AWS Cloud
⚪ An Exabyte-scale data transfer service that allows you to move extremely large amounts of data to AWS
✅ Secure transfer of large amounts of data into and out of the AWS Cloud

Explanation:-Snowball is a petabyte-scale data transport solution that uses devices designed to be secure to transfer large amounts of data into and out of the AWS Cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns. Customers today use Snowball to migrate analytics data, genomics data, video libraries, image repositories, backups, and to archive part of data center shutdowns, tape replacement or application migration projects. Transferring data with Snowball is simple, fast,

more secure, and can be as little as one-fifth the cost of transferring data via high-speed Internet.

○ A catalog of third-party software solutions that customers need to build solutions and run their businesses

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Q58) A customer is planning to move billions of images and videos to be stored on Amazon S3. The customer has approximately one Exabyte of data to move. Which of the following AWS Services is the best choice to transfer the data to AWS?

○ Amazon VPC

✅ Snowmobile

Explanation:-AWS Snowmobile is an Exabyte-scale data transfer service used to move extremely large amounts of data to AWS. You can transfer up to 100 Petabytes (PB) per Snowmobile, a 45-foot long ruggedized shipping container, pulled by a semi-trailer truck. Snowmobile makes it easy to move massive volumes of data to the cloud, including video libraries, image repositories, or even a complete data center migration. At exabyte scale, transferring data with Snowmobile is more secure, fast and cost effective.

○ Snowball

○ S3 Transfer Acceleration

Q59) As part of the AWS Migration Acceleration Program (MAP), what does AWS provide to accelerate Enterprise adoption of AWS? (Choose TWO)

✅ AWS Partners

Explanation:-AWS has helped thousands of organizations, including enterprises such as GE, the Coca-Cola Company, BP, Enel, Samsung, NewsCorp, and Twenty-First Century Fox, migrate to the cloud and free-up resources by lowering IT costs while improving productivity, operational resiliency, and business agility. The AWS Migration Acceleration Program (MAP) is designed to help enterprises that are committed to a migration journey achieve a range of these business benefits by migrating existing workloads to Amazon Web Services. MAP has been created to provide consulting support, training and services credits to reduce the risk of migrating to the cloud, build a strong operational foundation and help offset the initial cost of migrations. It includes a migration methodology for executing legacy migrations in a methodical way as well as robust set of tools to automate and accelerate common migration scenarios.
By migrating to AWS, enterprises will be able to focus on business innovation instead of dedicating time and attention to maintaining their existing systems and technical debt. Sacrifices and painful trade-offs no longer have to be made to get something to market quickly. Instead, enterprises can focus on differentiating their business in the marketplace and taking advantage of new capabilities. By building the foundation to operate mission critical workloads on AWS, you will build capabilities that can be leveraged across a variety of projects. AWS have a number of resources to support and sustain your migration efforts including an experienced partner ecosystem to execute migrations, AWS Professional Services team to provide best practices and prescriptive advice and a training program to help IT professionals understand and carry out migrations successfully.

○ Amazon PinPoint

✅ AWS Professional Services

Explanation:-AWS has helped thousands of organizations, including enterprises such as GE, the Coca-Cola Company, BP, Enel, Samsung, NewsCorp, and Twenty-First Century Fox, migrate to the cloud and free-up resources by lowering IT costs while improving productivity, operational resiliency, and business agility. The AWS Migration Acceleration Program (MAP) is designed to help enterprises that are committed to a migration journey achieve a range of these business benefits by migrating existing workloads to Amazon Web Services. MAP has been created to provide consulting support, training and services credits to reduce the risk of migrating to the cloud, build a strong operational foundation and help offset the initial cost of migrations. It includes a migration methodology for executing legacy migrations in a methodical way as well as robust set of tools to automate and accelerate common migration scenarios.
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○ AWS Artifact

○ Amazon Athena

Q60) Which of the following AWS Services helps with planning application migration to the AWS Cloud?

✅ AWS Application Discovery Service

Explanation:-AWS Application Discovery Service helps systems integrators quickly and reliably plan application migration projects by automatically identifying applications running in on-premises data centers, their associated dependencies, and their performance profiles. Planning data center migrations can involve thousands of workloads that are often deeply interdependent. Application discovery and dependency mapping are important early first steps in the migration process, but these tasks are difficult to perform at scale due to the lack of automated tools. AWS Application Discovery Service automatically collects configuration and usage data from servers, storage, and networking equipment to develop a list of applications, how they perform, and how they are interdependent. This information helps reduce the complexity and time in planning your cloud migration.

○ AWS Migration Hub

○ AWS Snowball Migration Service

○ AWS DMS

Q61) You want to transfer 200 Terabytes of data from on-premises locations to the AWS Cloud, which of the following can do the job in a cost effective way?

○ AWS Import/Export

✅ AWS Snowball

Explanation:-Snowball is a petabyte-scale data transport solution that uses secure appliances to transfer large amounts of data into and out of the AWS cloud. Using Snowball addresses common challenges with large-scale data transfers including high network costs, long transfer times, and security concerns. Transferring data with Snowball is simple, fast, secure, and can cost as little as one-fifth the cost of using high-speed Internet.
In the US regions, Snowball appliances come in two sizes: 50 TB and 80 TB. All other regions have 80 TB Snowballs only.
In either case, it is better (cost-effective) to use 3 or 4 snowball devices to transfer 200 TB.
3 snowballs * 80TB = 240 TB
4 snowballs * 50 TB = 200 TB
There are many options for transferring your data into AWS. Snowball is intended for transferring large amounts of data. If you want to transfer less

than 10 terabytes of data between your on-premises data centers and Amazon S3, Snowball might not be your most economical choice.
- ● AWS Snowmobile
- ● AWS DMS

Q62) Which of the following does NOT belong to the AWS Cloud Computing models?

- ● Software as a Service (SaaS)
- ● Platform as a Service (PaaS)
- ✅ Networking as a Service (NaaS)

Explanation:-There are three Cloud Computing Models:

1) Infrastructure as a Service (IaaS) - Infrastructure as a Service (IaaS) contains the basic building blocks for cloud IT and typically provide access to networking features, computers (virtual or on dedicated hardware), and data storage space. IaaS provides you with the highest level of flexibility and management control over your IT resources and is most similar to existing IT resources that many IT departments and developers are familiar with today.

2) Platform as a Service (PaaS) - Platform as a Service (PaaS) removes the need for your organization to manage the underlying infrastructure (usually hardware and operating systems) and allows you to focus on the deployment and management of your applications. This helps you be more efficient as you don't need to worry about resource procurement, capacity planning, software maintenance, patching, or any of the other undifferentiated heavy lifting involved in running your application.

3) Software as a Service (SaaS) - Software as a Service (SaaS) provides you with a completed product that is run and managed by the service provider. In most cases, people referring to Software as a Service are referring to end-user applications. With a SaaS offering you do not have to think about how the service is maintained or how the underlying infrastructure is managed; you only need to think about how you will use that particular piece of software. A common example of a SaaS application is web-based email which you can use to send and receive email without having to manage feature additions to the email product or maintain the servers and operating systems that the email program is running on.

- ● Infrastructure as a Service (IaaS)

Q63) Using Amazon EC2 falls under which of the following cloud computing models?

- ● PaaS
- ✅ IaaS

Explanation:-Infrastructure as a Service (IaaS) contains the basic building blocks for Cloud IT and typically provide access to networking features, computers (virtual or on dedicated hardware), and data storage space. Infrastructure as a Service provides you with the highest level of flexibility and management control over your IT resources and is most similar to existing IT resources that many IT departments and developers are familiar with today.

For example, a service such as Amazon Elastic Compute Cloud (Amazon EC2) is categorized as Infrastructure as a Service (IaaS) and requires the customer to perform all of the configuration and management tasks. Customers that deploy an Amazon EC2 instance are responsible for management of the guest operating system (including updates and security patches), any application software or utilities installed by the customer on the instances, and the configuration of the AWS-provided firewall (called a security group) on each instance.

- ● IaaS & SaaS
- ● SaaS

Q64) Which of the following Cloud Computing deployment models eliminates the need to run and maintain physical data centers?

- ● On-premises
- ✅ Cloud

Explanation:-There are three Cloud Computing Deployment Models:

1- Cloud:

A cloud-based application is fully deployed in the cloud and all parts of the application run in the cloud. This Cloud Computing deployment model eliminates the need to run and maintain physical data centers.

2- Hybrid:

A hybrid deployment is a way to connect infrastructure and applications between cloud-based resources and existing resources that are not located in the cloud (On-premises data centers).

3- On-premises:

Deploying resources on-premises, using virtualization and resource management tools, is sometimes called "private cloud". On-premises deployment does not provide many of the benefits of cloud computing but is sometimes sought for its ability to provide dedicated resources.

- ● IaaS
- ● PaaS