Practice Exam Questions

CompTIA

# **CompTIA Cloud+ Certification**

CV0-003





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# **CompTIA Cloud+ Certification Exam**

Version: 6.0

[Total Questions: 251]

#### **Question No:1**

A company is concerned about the security of its data repository that contains customer PII. A systems administrator is asked to deploy a security control that will prevent the exfiltration of such data. Which of the following should the systems administrator implement?

- A. DLP
- B. WAF
- C. FIM
- D. ADC

#### **Answer: A**

Reference: https://cloud.google.com/blog/products/identity-security/4-steps-to-stop-data-exfiltration-with-google-cloud

Implementing DLP (Data Loss Prevention) is the best solution to prevent the exfiltration of customer PII (Personally Identifiable Information) from a data repository. DLP is a security control that monitors, detects, and blocks sensitive data from leaving or being accessed by unauthorized parties. DLP can be applied at different levels, such as network, endpoint, storage, or cloud. DLP can help to protect customer PII from being leaked, stolen, or compromised.

## Question No: 2

A web application has been configured to use autoscaling for provisioning and deprovisioning more VMs according to the workload. The systems administrator deployed a new CI/CD tool to automate new releases of the web application. During the night, a script was deployed and configured to be executed by the VMs during bootstrapping. Now. the autoscaling configuration is creating a new VM ever\ five minutes. Which of the following actions will MOS I like y resolve the issue?

- A. Reducing the maximum threshold in the autoscaling configuration
- B. Debugging the script and redeploying it
- C. Changing the automation tool because it is incompatible
- D. Modifying the script to shut down the VM after five minutes

#### Answer: B

**Explanation:** The best way to resolve the issue where the autoscaling configuration is creating a new VM every five minutes after deploying a new CI/CD tool to automate new releases of the web application and configuring a script to be executed by the VMs during

bootstrapping is to debug the script and redeploy it. Debugging the script means finding and fixing any errors or bugs in the code or logic of the script that may cause unexpected or undesired behavior, such as triggering the autoscaling condition or failing to complete the bootstrapping process. Redeploying the script means updating or replacing the existing script with the corrected or improved version of the script. Reference: [CompTIA Cloud+ Certification Exam Objectives], Domain 4.0 Troubleshooting, Objective 4.5 Given a scenario, troubleshoot automation/orchestration issues.

## **Question No:3**

A security audit related to confidentiality controls found the following transactions occurring in the system:

#### GET

http://gateway.securetransaction.com/privileged/api/v1/changeResource?id=123&user=277

Which of the following solutions will solve the audit finding?

- A. Using a TLS-protected API endpoint
- **B.** Implementing a software firewall
- C. Deploying a HIDS on each system
- D. Implementing a Layer 4 load balancer

#### **Answer: A**

#### Reference:

https://cheatsheetseries.owasp.org/cheatsheets/Transport\_Layer\_Protection\_Cheat\_Sheet .html

The audit finding is related to confidentiality, which means the data should be protected from unauthorized access. The current API endpoint is using HTTP, which is not secure and can expose the data in transit. Using a TLS-protected API endpoint would encrypt the data and prevent anyone from reading it. Reference: CompTIA Cloud+ Certification Exam Objectives, Domain 2.0 Security, Objective 2.1 Given a scenario, apply security configurations and compliance controls to meet cloud security requirements.

## **Question No:4**

A systems administrator is configuring RAID for a new server. This server will host files for

users and replicate to an identical server. While redundancy is necessary, the most important need is to maximize storage.

Which of the following RAID types should the administrator choose?

**A.** 5 **B.** 6 **C.** 10

**D.** 50

# Answer: C

# **Explanation:**

RAID 50 is a type of RAID level that combines RAID 5 and RAID 0 to create a nested RAID configuration. RAID 50 consists of two or more RAID 5 arrays that are striped together using RAID 0. RAID 50 can provide redundancy, fault tolerance, and high performance for large data sets. RAID 50 can also maximize storage, as it has a higher usable capacity than other RAID levels with similar features, such as RAID 6 or RAID 10. The administrator should choose RAID 50 to configure a new server that will host files for users and replicate to an identical server, as it can meet the needs of redundancy and storage maximization. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

# Question No : 5

A systems administrator recently upgraded the processors in a web application host. Upon the next login, the administrator sees a new alert regarding the license being out of compliance.

Which of the following licensing models is the application MOST likely using?

- A. Per device
- B. Per user
- C. Core-based
- D. Volume-based

# Answer: C

**Explanation:** Core-based licensing is a type of licensing model that charges based on the number of processor cores in a system or server. Core-based licensing is often used by software vendors to align their pricing with the performance and capacity of modern hardware. Core-based licensing can also enable customers to optimize their licensing costs

by choosing the appropriate hardware configuration for their needs. Upgrading the processors in a web application host can affect the core-based licensing of the application, as it may increase the number of cores that need to be licensed. This can result in an alert regarding the license being out of compliance if the license is not updated accordingly. References: CompTIA Cloud+ Certification Exam Objectives, page 20, section 4.2

Reference: https://download.microsoft.com/download/3/d/4/3d42bdc2-6725-4b29-b75a-a5b04179958b/ percorelicensing\_definitions\_vlbrief.pdf

## Question No : 6

A cloud administrator has created a new asynchronous workflow lo deploy VMs to the cloud in bulk. When the workflow is tested for a single VM, it completes successfully. However, if the workflow is used to create 50 VMs at once, the job fails. Which of the following is the MOST likely cause of the issue? (Choose two.)

- A. Incorrect permissions
- B. Insufficient storage
- C. Billing issues with the cloud provider
- D. No connectivity to the public cloud
- E. Expired API token
- F. Disabled autoscaling

## Answer: B,E

**Explanation:** The most likely causes of the issue where the new asynchronous workflow fails to create 50 VMs at once in the public cloud are insufficient storage and expired API token. Insufficient storage means that there is not enough disk space available in the public cloud to accommodate all the VMs that are being created simultaneously. This could result in errors or failures during the provisioning process. Expired API token means that the authentication credential that is used by the workflow to communicate with the public cloud service has expired or become invalid. This could result in errors or failures during the API calls or requests. Reference: CompTIA Cloud+ Certification Exam Objectives, Domain 4.0 Troubleshooting, Objective 4.5 Given a scenario, troubleshoot automation/orchestration issues.

A cloud architect wants to minimize the risk of having systems administrators in an IaaS compute instance perform application code changes. The development group should be the only group allowed to modify files in the directory.

Which of the following will accomplish the desired objective?

- A. Remove the file write permissions for the application service account.
- **B.** Restrict the file write permissions to the development group only.
- C. Add access to the fileshare for the systems administrator's group.
- D. Deny access to all development user accounts

#### Answer: B

#### **Explanation:**

File write permissions are permissions that control who can modify or delete files in a directory or system. Restricting the file write permissions to the development group only can help minimize the risk of having systems administrators in an IaaS compute instance perform application code changes, as it can prevent anyone other than the development group from altering or removing any files in the directory where the application code is stored. Restricting the file write permissions can also help maintain consistency and integrity, as it can ensure that only authorized and qualified users can make changes to the application code. References: CompTIA Cloud+ Certification Exam Objectives, page 14, section 2.7

# Question No: 8

Which of the following definitions of serverless computing BEST explains how it is different from using VMs?

**A.** Serverless computing is a cloud-hosting service that utilizes infrastructure that is fully managed by the CSP.

**B.** Serverless computing uses predictable billing and offers lower costs than VM compute services.

**C.** Serverless computing is a scalable, highly available cloud service that uses SDN technologies.

**D.** Serverless computing allows developers to focus on writing code and organizations to focus on business.

## Answer: D

Explanation: This is the best definition of serverless computing that explains how it is

different from using VMs (Virtual Machines). Serverless computing is a cloud service model that provides customers with a platform to run applications or functions without having to manage or provision any underlying infrastructure or resources, such as servers, storage, network, OS, etc. Serverless computing is different from using VMs in the following ways:

- Serverless computing allows developers to focus on writing code and organizations to focus on business, rather than spending time and effort on managing or scaling VMs or other infrastructure components.
- Serverless computing is event-driven and pay-per-use, which means that applications or functions are executed only when triggered by a specific event or request, and customers are charged only for the resources consumed during the execution time.
- Serverless computing is more scalable and flexible than using VMs, as it can automatically adjust the capacity and performance of applications or functions according to demand or workload, without requiring any manual intervention or configuration.

# Question No : 9

A systems administrator wants to restrict access to a set of sensitive files to a specific group of users. Which of the following will achieve the objective?

- A. Add audit rules on the server
- **B.** Configure data loss prevention in the environment
- C. Change tine permissions and ownership of the files
- D. Implement a HIPS solution on the host

## Answer: C

**Explanation:** The best way to restrict access to a set of sensitive files to a specific group of users is to change the file permissions and ownership of the files. File permissions and ownership are attributes that determine who can read, write, execute, or modify the files. By changing the file permissions and ownership, the systems administrator can grant or deny access to the files based on the user identity or group membership. Reference: CompTIA Cloud+ Certification Exam Objectives, Domain 2.0 Security, Objective 2.3 Given a scenario, implement appropriate access control measures for a cloud

environment.

A company is considering consolidating a number of physical machines into a virtual infrastructure that will be located at its main office. The company has the following requirements:

High-performance VMs

More secure

Has system independence

Which of the following is the BEST platform for the company to use?

- A. Type 1 hypervisor
- B. Type 2 hypervisor
- C. Software application virtualization
- **D.** Remote dedicated hosting

#### **Answer: A**

**Explanation:** A type 1 hypervisor is what would best meet the requirements of highperformance VMs (Virtual Machines), more secure, and has system independence for a company that wants to move its environment from on premises to the cloud without vendor lock-in. A hypervisor is a software or hardware that allows multiple VMs to run on a single physical host or server. A hypervisor can be classified into two types:

- Type 1 hypervisor: This is a hypervisor that runs directly on the hardware or bare metal of the host or server, without any underlying OS (Operating System). A type 1 hypervisor can provide benefits such as:
- Type 2 hypervisor: This is a hypervisor that runs on top of an OS of the host or server, as a software application or program. A type 2 hypervisor can provide benefits such as:

## **Question No : 11**

A systems administrator is performing upgrades to all the hypervisors in the environment. Which of the following components of the hypervisors should be upgraded? (Choose two.)

- A. The fabric interconnects
- B. The virtual appliances
- C. The firmware
- D. The virtual machines
- E. The baselines
- F. The operating system

#### Answer: C,F

**Explanation:** These are the components of the hypervisors that should be upgraded by the administrator who is performing upgrades to all the hypervisors in the environment. A hypervisor is a software or hardware that allows multiple VMs (Virtual Machines) to run on a single physical host or server. A hypervisor consists of various components, such as:

- The firmware: This is the software that controls the basic functions and operations of the hardware or device. The firmware can affect the performance, compatibility, and security of the hypervisor and the VMs. The firmware should be upgraded to ensure that it supports the latest features and functions of the hardware or device, as well as fix any bugs or vulnerabilities.
- The operating system: This is the software that manages the resources and activities of the hypervisor and the VMs. The operating system can affect the functionality, reliability, and efficiency of the hypervisor and the VMs. The operating system should be upgraded to ensure that it supports the latest applications and services of the hypervisor and the VMs, as well as improve stability and performance.

# Question No : 12

A technician just received the lessons learned from some recent data that was lost due to an on-premises file-server crash. The action point is to change the backup strategy to minimize manual intervention. Which of the following is the BEST approach for the technician to implement?

- A. Backup as a service
- B. RAID 1
- **C.** Long-term storage
- D. New backup devices

## Answer: A

**Explanation:** Backup as a service (BaaS) is the best approach for changing the backup strategy to minimize manual intervention after a data loss due to an on-premises file-server crash. BaaS is a cloud-based service that provides backup and recovery solutions for customers' data and systems. BaaS can automate and simplify backup processes by using cloud storage, encryption, deduplication, compression, scheduling, etc., without requiring customers to purchase or maintain backup hardware or software.

A systems administrator has received an email from the virtualized environment's alarms indicating the memory was reaching full utilization. When logging in, the administrator notices that one out of a five-host cluster has a utilization of 500GB out of 512GB of RAM. The baseline utilization has been 300GB for that host. Which of the following should the administrator check NEXT?

A. Storage array
B. Running applications
C. VM integrity
D. Allocated guest resources

#### Answer: D

**Explanation:** Allocated guest resources is what the administrator should check next after receiving an email from the virtualized environment's alarms indicating the memory was reaching full utilization and noticing that one out of a five-host cluster has a utilization of 500GB out of 512GB of RAM. Allocated guest resources are the amount of resources or capacity that are assigned or reserved for each guest system or device within a host system or device. Allocated guest resources can affect performance and utilization of host system or device by determining how much resources or capacity are available or used by each guest system or device. Allocated guest resources should be checked next by comparing them with the actual usage or demand of each guest system or device, as well as identifying any overallocation or underallocation of resources that may cause inefficiency or wastage.

## **Question No: 14**

A systems administrator is responding to an outage in a cloud environment that was caused by a network-based flooding attack. Which of the following should the administrator configure to mitigate the attack?

A. NIPS

- B. Network overlay using GENEVE
- C. DDoS protection
- D. DoH

#### Answer: C

**Explanation:** DDoS protection is what the administrator should configure to mitigate a network-based flooding attack that caused an outage in a cloud environment. A network-based flooding attack is a type of attack that sends a large amount of network traffic or requests to a target system or service, such as a server, website, application, etc., with the intention of overwhelming or exhausting its resources or capacity. A network-based flooding attack can cause an outage in a cloud environment by disrupting or degrading the

availability or performance of the target system or service, as well as affecting other systems or services that share the same network or infrastructure. DDoS protection is a tool or service that detects and prevents network-based flooding attacks, also known as Distributed Denial of Service (DDoS) attacks. DDoS protection can mitigate a network-based flooding attack by providing features such as:

- Filtering: DDoS protection can filter network traffic or requests based on various criteria, such as source, destination, protocol, content, etc., and block or allow them accordingly.
- Diverting: DDoS protection can divert network traffic or requests away from the target system or service to another location or device, such as a scrubbing center, proxy, firewall, etc., where they can be analyzed and processed.
- Scaling: DDoS protection can scale network resources or capacity dynamically and automatically to handle the increased demand or load caused by the networkbased flooding attack.

## Question No : 15

A Chief Information Security Officer (CISO) is evaluating the company's security management program. The CISO needs to locate all the assets with identified deviations and mitigation measures. Which of the following would help the CISO with these requirements?

A. An SLA documentB. ADR planC. SOC proceduresD. A risk register

## Answer: D

**Explanation:** A risk register is a document that records all the identified risks, their causes, impacts, probabilities, mitigation measures, and status for a project or an organization. A risk register helps to manage and monitor risks throughout their lifecycle and ensure they are addressed appropriately. A risk register would help the CISO to locate all the assets with identified deviations and mitigation measures.

# **Question No: 16**

A company needs a solution to find content in images. Which of the following technologies, when used in conjunction with cloud services, would facilitate the BEST solution?

- A. Internet of Things
- B. Digital transformation
- **C.** Artificial intelligence
- D. DNS over TLS

## Answer: C

**Explanation:** Artificial intelligence (AI) is the technology that, when used in conjunction with cloud services, would facilitate the best solution for finding content in images. AI is a branch of computer science that aims to create machines or systems that can perform tasks that normally require human intelligence, such as reasoning, learning, decision making, etc. AI can be used to analyze images and extract information such as objects, faces, text, emotions, etc., using techniques such as computer vision, machine learning, natural language processing, etc. AI can help to find content in images faster, more accurately, and more efficiently than manual methods.

# Question No : 17

A systems administrator is provisioning VMs in a cloud environment and has been told to select an OS build with the furthest end-of-life date.

Which of the following OS builds would be BEST for the systems administrator to use?

- A. Open-source
- B. LTS
- C. Canary
- D. Beta
- E. Stable

## Answer: B

**Explanation:** Long-term support (LTS) is a type of release cycle that provides extended support and maintenance for software products or operating systems. LTS releases typically have longer end-of-life dates than regular releases, as they receive security updates, bug fixes, and patches for several years after their initial release date. LTS releases can also offer higher stability, reliability, and compatibility than regular releases, as they undergo more testing and quality assurance processes before being released. LTS is the best OS build for a systems administrator to use when provisioning VMs in a cloud environment and being told to select an OS build with the furthest end-of-life date. References: CompTIA Cloud+ Certification Exam Objectives, page 11, section 1.6

## Question No : 18

A SAN that holds VM files is running out of storage space.

Which of the following will BEST increase the amount of effective storage on the SAN?

- A. Enable encryption
- **B.** Increase IOPS
- C. Convert the SAN from RAID 50 to RAID 60
- **D.** Configure deduplication

#### **Answer: D**

**Explanation:** Deduplication is a type of data compression technique that eliminates redundant or duplicate data blocks or segments in a storage system or device. Configuring deduplication can help increase the amount of effective storage on a SAN that holds VM files and is running out of storage space, as it can reduce the storage space consumption and increase the storage space utilization by storing only unique data blocks or segments. Configuring deduplication can also improve performance and efficiency, as it can speed up data transfer and backup processes and save network bandwidth and power consumption. References: CompTIA Cloud+ Certification Exam Objectives, page 9, section 1.4

#### **Question No: 19**

A systems administrator wants to have near-real-time information on the volume of data being exchanged between an application server and its clients on the Internet.

Which of the following should the systems administrator implement to achieve this objective?

**A.** A stateful firewall**B.** DLP

#### **C.** DNSSEC **D.** Network flows

#### **Answer: D**

#### **Explanation:**

Network flows are records of network traffic that capture information such as source and destination IP addresses, ports, protocols, timestamps, and byte and packet counts. Network flows can provide near-real-time information on the volume of data being exchanged between a system and its clients on the Internet, as they can measure and monitor the amount and rate of network traffic for each connection or session. Network flows can also help analyze network performance, troubleshoot network issues, and detect network anomalies or security incidents. A systems administrator should implement network flows to achieve the objective of having near-real-time information on the volume of data being exchanged between an application server and its clients on the Internet. References: CompTIA Cloud+ Certification Exam Objectives, page 16, section 3.2

## Question No : 20

A company has an in-house-developed application. The administrator wants to utilize cloud services for additional peak usage workloads. The application has a very unique stack of dependencies.

Which of the following cloud service subscription types would BEST meet these requirements?

- A. PaaS
- B. SaaS
- C. DBaaS
- D. laaS

#### **Answer: D**

**Explanation:** IaaS (Infrastructure as a Service) is a cloud service model that provides basic computing resources such as servers, storage, network, etc., to the customers. The customers have full control and flexibility over these resources and can install and configure any software they need on them. IaaS is suitable for applications that have a unique stack of dependencies that may not be supported by other cloud service models.

## Question No : 21

After analyzing a web server's logs, a systems administrator sees that users are connecting to the company's application through HTTP instead of HTTPS. The administrator then configures a redirect from HTTP to HTTPS on the web server, and the application responds with a connection time-out message.

Which of the following should the administrator verify NEXT?

- A. The TLS certificate
- B. The firewall rules
- C. The concurrent connection limit
- D. The folder permissions

#### Answer: B

#### **Explanation:**

The firewall rules are the set of policies that define which traffic is allowed or denied between different network segments or devices. The firewall rules can affect the redirect from HTTP to HTTPS on the web server, as they can block or allow traffic based on ports and protocols. If the firewall rules are not configured properly to allow HTTPS traffic on port 443, the application may respond with a connection time-out message. The administrator should verify the firewall rules next to ensure that HTTPS traffic is permitted between the web server and its clients. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

## Question No : 22

A company would like to migrate its current on-premises workloads to the public cloud. The current platform requires at least 80 instances running at all times to work properly. The company wants the workload to be highly available, even if the cloud provider loses one region due to a catastrophe, and the costs to be kept to a minimum. Which of the following strategies should the company implement?

- A. Create /25 subnets in two regions and run 80 instances on each one.
- **B.** Create /26 subnets in two regions and run 40 instances on each one.
- **C.** Create /26 subnets in three regions and run 40 instances on each one.
- **D.** Create /26 subnets in three regions and run 80 instances on each one.

#### Answer: B

**Explanation:** The best strategy to migrate the current on-premises workloads to the public cloud for the company that requires at least 80 instances running at all times and wants the workload to be highly available and cost-effective is to create /26 subnets in two regions and run 40 instances on each one. A /26 subnet can accommodate up to 62 hosts, which is enough for 40 instances. By creating subnets in two regions, the company can achieve high availability and redundancy in case one region fails due to a catastrophe. By running 40 instances on each subnet, the company can meet the minimum requirement of 80 instances and also save on costs by avoiding overprovisioning or underutilization of resources. Reference: What is VPN? How It Works, Types of VPN - Kaspersky

#### Question No : 23

A cloud administrator is troubleshooting a highly available web application running within three containers behind a Layer 7 load balancer with a WAF inspecting all traffic. The application frequently asks the users to log in again even when the session timeout has not been reached. Which of the following should the cloud administrator configure to solve this issue?

- A. Firewall outbound rules
- B. Firewall inbound rules
- C. Load balancer certificates
- **D.** Load balancer stickiness
- E. WAF transaction throttling

#### Answer: D

#### Reference:

https://docs.aws.amazon.com/elasticloadbalancing/latest/application/application-loadbalancers.html#sticky-sessions

Load balancer stickiness is what the cloud administrator should configure to solve the issue of the application frequently asking the users to log in again even when the session timeout has not been reached for a highly available web application running within three containers behind a Layer 7 load balancer with a WAF inspecting all traffic. Load balancer stickiness is a feature that allows customers to maintain user sessions or connections with the same server or node that provides a service or function, such as a web application, database, etc., even when there are multiple servers or nodes behind a load balancer. Load balancer stickiness can solve the issue by providing benefits such as:

Consistency: Load balancer stickiness can provide consistency by ensuring that users receive the same service or function from the same server or node throughout their session or connection, without any changes or variations.

Performance: Load balancer stickiness can provide performance by reducing the latency or overhead of switching between different servers or nodes during a session or connection, which may cause delays or errors.

Security: Load balancer stickiness can provide security by preserving and protecting user authentication or authorization information on the same server or node during a session or connection, without exposing or transferring it to other servers or nodes.

# Question No : 24

Over the last couple of years, the growth of a company has required a more complex DNS and DHCP environment. Which of the following should a systems administration team implement as an appropriate solution to simplify management?

- A. IPAM
- B. DoH
- C. VLAN
- D. SDN

## Answer: A

**Explanation:** The best solution to simplify management of a more complex DNS and DHCP environment for a company that has grown over the last couple of years is IPAM (IP address management). IPAM is a tool or service that allows centralized management and automation of DNS and DHCP functions, such as IP address allocation, reservation, release, or renewal, as well as domain name registration or resolution. IPAM can also provide monitoring, auditing, reporting, and security features for DNS and DHCP resources. Reference: [CompTIA Cloud+ Certification Exam Objectives], Domain 3.0 Maintenance, Objective 3.4 Given a scenario, implement automation and orchestration to optimize cloud operations.

## Question No : 25

A cloud administrator has deployed several VM instances that are running the same applications on VDI nodes. Users are reporting that a role instance is looping between STARTED, INITIALIZING, BUSY, and stop. Upon investigation, the cloud administrator can see the status changing every few minutes. Which of the following should be done to resolve the issue?

- **A.** Reboot the hypervisor.
- **B.** Review the package and configuration file.
- **C.** Configure service healing.
- D. Disable memory swap.

#### Answer: B

**Explanation:** The best way to resolve the issue where a role instance is looping between STARTED, INITIALIZING, BUSY, and STOP after deploying several VM instances that are running the same applications on VDI nodes is to review the package and configuration file. The package and configuration file are the components that define the application and its settings for the VM instances. The package contains the application code, binaries, and dependencies, while the configuration file contains the parameters, values, and settings for the application. Reviewing these components can help identify and fix any errors or inconsistencies that may cause the role instance to loop or fail. Reference: CompTIA Cloud+ Certification Exam Objectives, Domain 4.0 Troubleshooting, Objective 4.4 Given a scenario, troubleshoot deployment issues.

## **Question No : 26**

A systems administrator is troubleshooting network throughput issues following a deployment. The network is currently being overwhelmed by the amount of traffic between the database and the web servers in the environment.

Which of the following should the administrator do to resolve this issue?

- A. Set up affinity rules to keep web and database servers on the same hypervisor
- B. Enable jumbo frames on the gateway
- C. Move the web and database servers onto the same VXLAN
- D. Move the servers onto thick-provisioned storage

## Answer: C

**Explanation:** A virtual extensible local area network (VXLAN) is a type of network virtualization technology that creates logical networks or segments that span across multiple physical networks or locations. Moving the web and database servers onto the same VXLAN can help resolve the network throughput issues following a deployment, as it can reduce the network traffic between the database and the web servers by using a common virtual network identifier (VNI) and encapsulating the traffic within UDP packets. Moving the web and database servers onto the same VXLAN can also improve performance and security, as it can provide higher scalability, isolation, and encryption for

the network traffic. References: CompTIA Cloud+ Certification Exam Objectives, page 15, section 2.8

## **Question No: 27**

A DevOps administrator is designing a new machine-learning platform. The application needs to be portable between public and private clouds and should be kept as small as possible. Which of the following approaches would BEST meet these requirements?

- A. Virtual machines
- B. Software as a service
- C. Serverless computing
- **D.** Containers

#### **Answer: D**

**Explanation:** Containers are the best approach to design a new machine-learning platform that needs to be portable between public and private clouds and should be kept as small as possible. Containers are isolated environments that can run applications and their dependencies without interfering with other processes or systems. Containers are lightweight, portable, and scalable, which makes them ideal for machine-learning applications. Containers can be moved easily between public and private clouds without requiring any changes or modifications. Containers can also reduce the size and complexity of applications by using only the necessary components and libraries.

#### **Question No: 28**

Which of the following cloud services is fully managed?

A. laaS
B. GPU in the cloud
C. loT
D. Serverless compute
E. SaaS