CompTIA

Exam Questions CV0-004

CompTIA Cloud+

NEW QUESTION 1
A cloud solutions architect needs to have consistency between production, staging, and development environments. Which of the following options will best achieve this goal?

A. Using Terraform templates with environment variables
B. Using Grafana in each environment
C. Using the ELK stack in each environment
D. Using Jenkins agents in different environments

Answer: A

Explanation:
Terraform templates with environment variables can ensure consistency across different environments such as production, staging, and development. Terraform allows for infrastructure as code, which can be used to define and maintain infrastructure with consistency.References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 2
A company requests that its cloud administrator provision virtual desktops for every user. Given the following information:
• One hundred users are at the company.
• A maximum of 30 users work at the same time.
• Users cannot be interrupted while working on the desktop. Which of the following strategies will reduce costs the most?

A. Provisioning VMs of varying sizes to match user needs
B. Configuring a group of VMs to share with multiple users
C. Using VMs that have spot availability
D. Setting up the VMs to turn off outside of business hours at night

Answer: D

Explanation:
Setting up the VMs to turn off outside of business hours at night will reduce costs the most, especially since a maximum of 30 users work at the same time and users cannot be interrupted while working. This approach ensures that resources are used only when necessary.References: Cost management and efficient resource utilization strategies like scheduling VMs to turn off during idle times are discussed within the financial management aspects of cloud services in the CompTIA Cloud+ exam objectives.

NEW QUESTION 3
A cloud engineer is troubleshooting an application that consumes multiple third-party REST APIs. The application is randomly expenenang high latency. Which of the following would best help determine the source of the latency?

A. Configuring centralized logging to analyze HTTP requests
B. Running a flow log on the network to analyze the packets
C. Configuring an API gateway to track all incoming requests
D. Enabling tracing to detect HTTP response times and codes

Answer: D

Explanation:
Enabling tracing in the application can help determine the source of high latency by providing detailed information on HTTP request and response times, as well as response codes. This can identify which API calls are experiencing delays and contribute to overall application latency, allowing for targeted troubleshooting and optimization.

NEW QUESTION 4
The change control board received a request to approve a configuration change 10 deploy in the cloud production environment. Which of the following should have already been competed?

A. Penetration test
B. End-to-end security testing
C. Cost benefit analysis
D. User acceptance testing

Answer: D

Explanation:
Before a configuration change is deployed in the cloud production environment, it is crucial to conduct User Acceptance Testing (UAT). UAT involves testing the system by the end-users or clients to ensure it can handle required tasks in real-world scenarios, according to specifications. This testing is the final stage before the change is approved for production, ensuring that all functionalities meet user requirements and the system is ready for deployment.References: The CompTIA Cloud+ certification highlights the significance of various testing phases, including UAT, as part of the cloud deployment process to validate the system's readiness and functionality for end-users.

NEW QUESTION 5
Servers in the hot site are clustered with the main site.

A. Network traffic is balanced between the main site and hot site servers.
B. Offline server backups are replicated hourly from the main site.
C. All servers are replicated from the main site in an online status.
D. Which of the following best describes a characteristic of a hot site?

Answer: C

Explanation:
When servers in a hot site are clustered with the main site, it indicates that all servers are replicated from the main site in an online status. This means that the hot site maintains a live, real-time copy of data and applications, ensuring immediate availability in the event of a failure at the main site. Unlike options A and B, which describe load balancing and backup strategies respectively, clustering with a hot site as described in option C ensures that the hot site can take over with minimal downtime, maintaining business continuity.
References: CompTIA Cloud+ CV0-004 Study Guide and Official CompTIA Content

NEW QUESTION 6
A DevOps engineer is integrating multiple systems. Each system has its own API that exchanges data based on different application-level transactions. Which of the following delivery mechanisms would best support this integration?

A. Enterprise service bus
B. Socket
C. RPC
D. Queue

Answer: A

Explanation:
An Enterprise Service Bus (ESB) is designed to facilitate application integration by providing a centralized architecture for high-level, message-based, and event-driven communication between different systems. It is particularly well-suited for integrating multiple systems with their own APIs because it can handle various data formats and protocols, enabling different applications to communicate with each other seamlessly. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 7
A systems administrator notices a surge of network traffic is coming from the monitoring server. The administrator discovers that large amounts of data are being downloaded to an external source. While investigating, the administrator reviews the following logs:

Protocol	Local address	Foreign address	State
TCP	10.181.12.5:20	172.17.250.12	ESTABLISHED
TCP	10.181.12.5:22	172.32.58.39	ESTABLISHED
TCP	10.181.12.5:443	172.30.252.204	ESTABLISHED
TCP	10.181.12.5:4443	10.11.15.82	ESTABLISHED
TCP	10.181.12.5:8048	172.24.255.192	TIME_WAIT

Which of the following ports has been compromised?

A. Port 20
B. Port 22
C. Port 443
D. Port 4443
E. Port 8048

Answer: E

Explanation:
Based on the logs provided, the port that has been compromised is Port 8048. The state "TIME_WAIT" indicates that this port was recently used to establish a connection that has now ended. This could be indicative of the recent activity where large amounts of data were downloaded to an external source, suggesting a potential security breach. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 8
Which of the following would allow a cloud engineer to flatten a deeply nested JSON log to improve readability for analysts?

A. Grafana
B. Kibana
C. Elasticsearch
D. Logstash

Answer: D

Explanation:
Logstash can be used to flatten a deeply nested JSON log, which would improve readability for analysts. Logstash is a data processing pipeline that ingests data from various sources, transforms it, and then sends it to a "stash" like Elasticsearch. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Data Management

NEW QUESTION 9

A cloud engineer has provisioned a VM for a high-frequency trading application. After the VM is put into production, users report high latency in trades. The engineer checks the last six hours of VM metrics and sees the following:
• CPU utilization is between 30% to 60%.
• NetworkIn is between 50Kbps and 70Kbps.
• NetworkOut is between 3.000Kpbs and 5.000Kbps.
• DiskReadOps is at 30.
• DiskWriteOps is at 70
• Memory utilization is between 50% and 70%.
Which of the following steps should the engineer take next to solve the latency issue?

A. Move to a network-optimized instance type as the network throughput is not enough.
B. Modify the disk IOPS to a higher value as the disk IO is being bottlenecked at 100 IOPS.
C. Increase the memory of the instance as the high-frequency trading application requires more RAM.
D. Increase the instance size to allocate more vCPUs as the CPU utilization is very high.

Answer: A

Explanation:
Since the NetworkOut is significantly higher than NetworkIn and considering the nature of a high-frequency trading application, the issue most likely lies with network throughput. Moving to a network-optimized instance type would provide higher network bandwidth, which can reduce latency in trades.References: This solution is derived from the Management and Technical Operations domain of the CompTIA Cloud+ objectives, focusing on performance optimization for cloud services.

NEW QUESTION 10
Which of the following requirements are core considerations when migrating a small business's on-premises applications to the cloud? (Select two).

A. Availability
B. Hybrid
C. Testing
D. Networking
E. Compute
F. Logs

Answer: AD

Explanation:
When migrating on-premises applications to the cloud for a small business, availability and networking are core considerations. Ensuring that applications are available and that the network is capable of handling the new cloud traffic are pivotal for a successful transition.References: The migration process and its core considerations, including availability and networking, are topics within the Business Principles of Cloud Environments in the CompTIA Cloud+ material.

NEW QUESTION 10
A company has decided to adopt a microservices architecture for its applications that are deployed to the cloud. Which of the following is a major advantage of this type of architecture?

A. Increased security
B. Simplified communication
C. Reduced server cost
D. Rapid feature deployment

Answer: D

Explanation:
A major advantage of adopting a microservices architecture is rapid feature deployment. Microservices allow for independent development, deployment, and scaling of individual service components, enabling teams to bring new features to market more quickly and efficiently compared to monolithic architectures.References: The CompTIA Cloud+ certification covers cloud design aspects, including architectural models like microservices, emphasizing their role in facilitating agile development practices and rapid feature release cycles in cloud environments.

NEW QUESTION 13
An administrator is creating a cron job that shuts down the virtual machines at night to save on costs. Which of the following is the best way to achieve this task?
A)

```
for X in list_vms() do
if [ describe_vm_status(X) || running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

B)

```
for X in list_vms() do
if [ describe_vm_status(X) > running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

C)

```
for X in list_vms() do
if [ describe_vm_status(X) == running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

D)

```
for X in list_vms() do
if [ describe_vm_status(X) != running]
     shutdown_vm(X)
else
     echo "vm $X is stopped"
done
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

Explanation:
Option C is the correct script for shutting down virtual machines that are currently running. It iterates through a list of VMs, checks if the status of each VM is 'running', and if so, proceeds to shut down the VM. The script then prints a message stating that the VM has been stopped. This approach ensures that only VMs that are actively running are targeted for shutdown, optimizing resource utilization and cost savings.

NEW QUESTION 15
Which of the following is the most cost-effective way to store data that is infrequently accessed?

A. Cold site
B. Hot site
C. Off-site
D. Warm site

Answer: C

Explanation:
The most cost-effective way to store data that is infrequently accessed is typically an off-site storage service, often referred to as cold or archival storage. This type of storage is designed for data that is rarely accessed, providing lower storage costs.References: Data storage solutions and their cost implications, including off-site (cold or archival) storage for infrequently accessed data, are part of the cloud storage options discussed in CompTIA Cloud+.

NEW QUESTION 19
An e-commerce store is preparing for an annual holiday sale. Previously, this sale has increased the number of transactions between two and ten times the normal level of transactions. A cloud administrator wants to implement a process to scale the web server seamlessly. The goal is to automate changes only when necessary and with minimal cost.
Which of the following scaling approaches should the administrator use?

A. Scale horizontally with additional web servers to provide redundancy.
B. Allow the load to trigger adjustments to the resources.
C. When traffic increases, adjust the resources using the cloud portal.
D. Schedule the environment to scale resources before the sale begins.

Answer: B

Explanation:
To seamlessly scale the web server for an e-commerce store during an annual sale, it's best to allow the load to trigger adjustments to the resources. This approach uses autoscaling to automatically adjust the number of active servers based on the current load, ensuring an automated change that is cost-effective. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Scalability

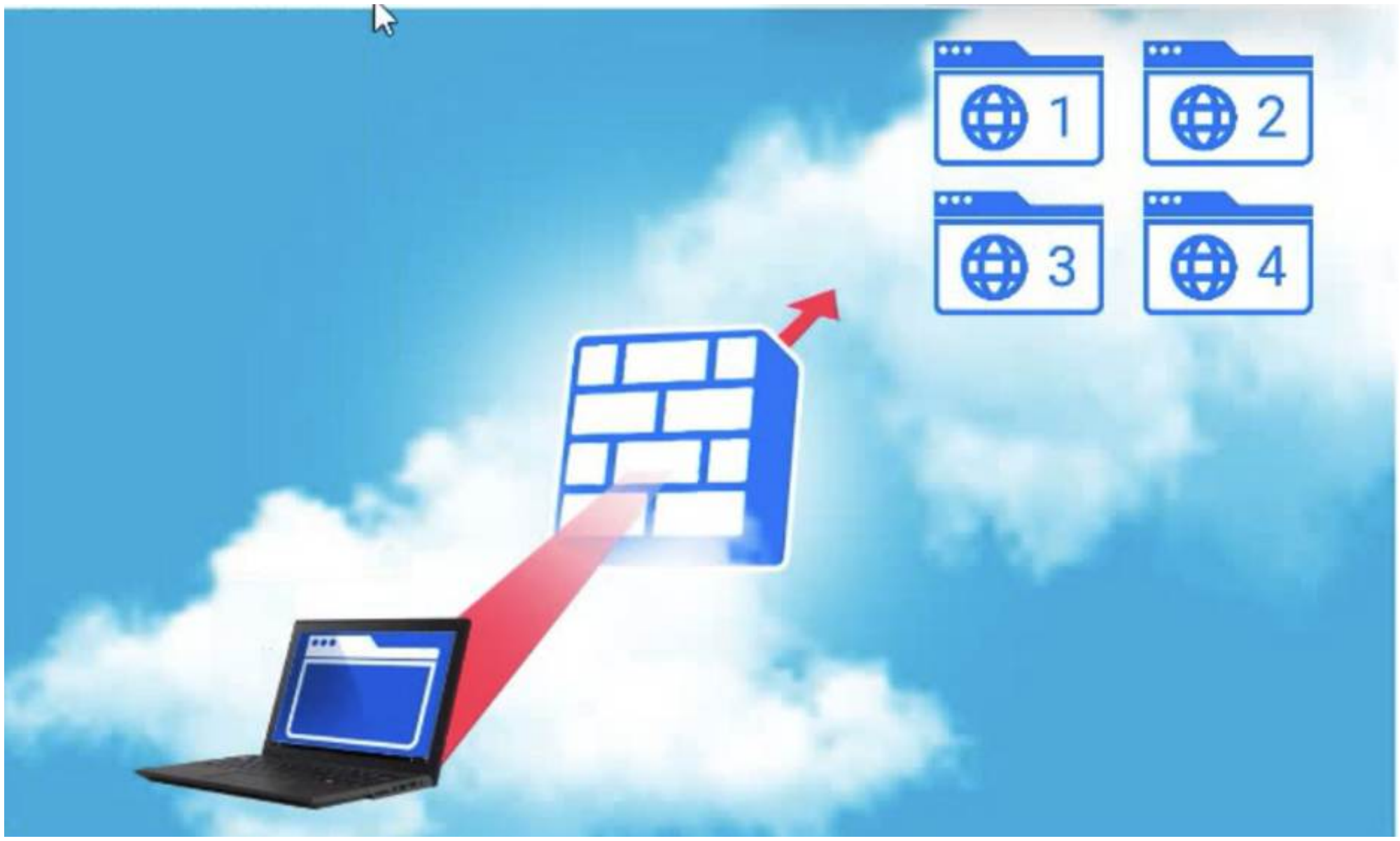
NEW QUESTION 23
A cloud developer needs to update a REST API endpoint to resolve a defect. When too many users attempt to call the API simultaneously, the following message is displayed:
Error: Request Timeout - Please Try Again Later
Which of the following concepts should the developer consider to resolve this error?

A. Server patch
B. TLS encryption
C. Rate limiting
D. Permission issues

Answer: C

Explanation:
To resolve the issue of a REST API endpoint timing out when too many users attempt to call the API simultaneously, the developer should consider implementing rate limiting. Rate limiting controls the number of requests a user can submit in a given amount of time, preventing overuse of the API resources and ensuring availability for all users. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Service Maintenance and Management

NEW QUESTION 28
SIMULATION
A company hosts various containerized applications for business uses. A client reports that one of its routine business applications fails to load the web-based login prompt hosted in the company cloud.
Click on each device and resource. Review the configurations, logs, and characteristics of each node in the architecture to diagnose the issue. Then, make the necessary changes to the WAF configuration to remediate the issue.



Web app 1

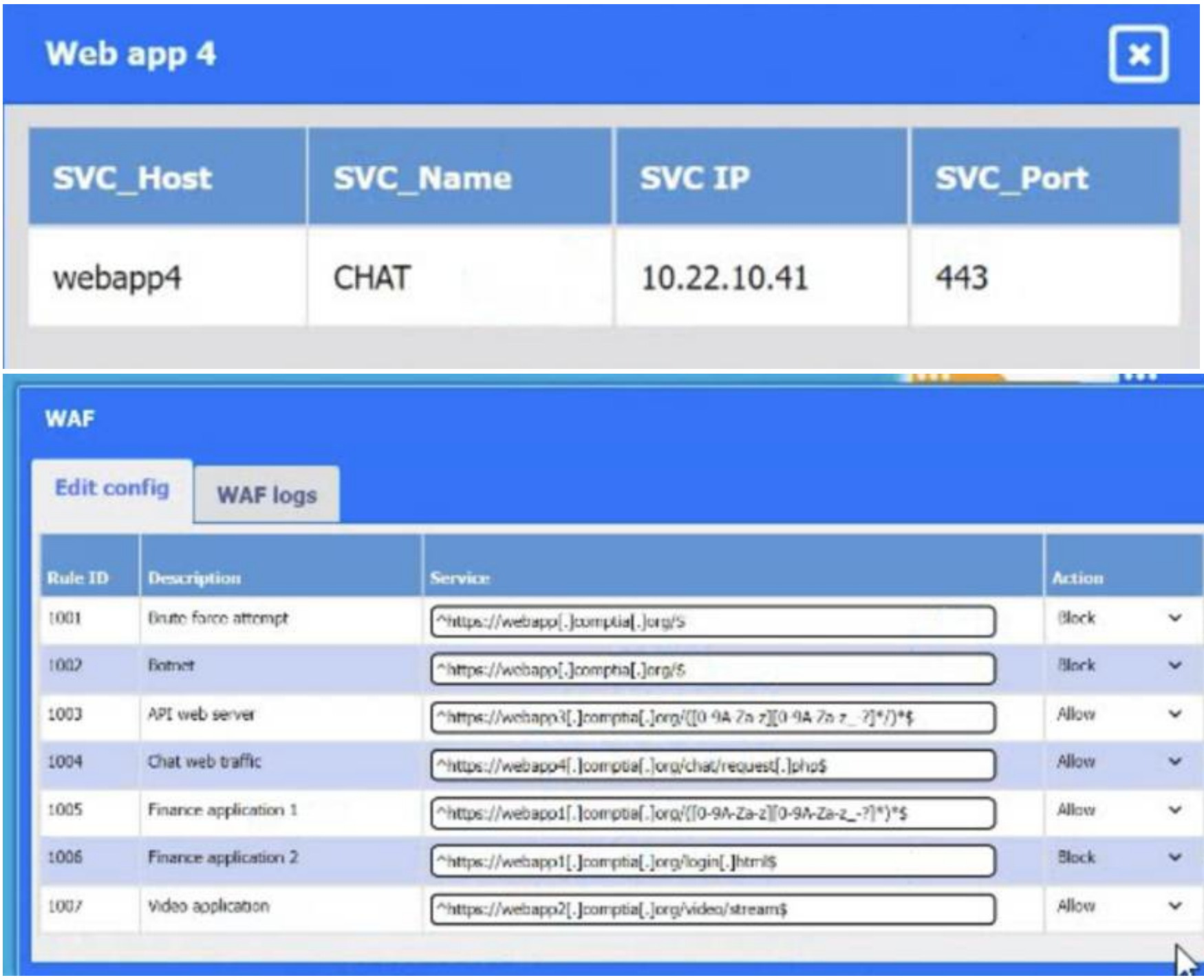
SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp1	FIN	10.22.10.11	443

Web app 2

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp2	VIDEO	10.22.10.21	443

Web app 3

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp3	API	10.22.10.31	443



A. Mastered
B. Not Mastered

Answer: A

Explanation:
From the image, it's noticeable that some finance application rules are set to "Block" traffic. If the client's issue is with a finance-related application not loading the login prompt, these rules could be the cause.
The rule with ID 1005, labeled "Finance application 1", is configured to allow access to "webapp1" for finance-related paths. However, rule 1006, labeled "Finance application 2", is set to block access to "webapp1" for login-related paths.
To remediate the issue based on the WAF configuration you have provided, you would want to:
? Ensure that the correct paths to the finance application are allowed through the WAF.
? Modify any rules that are incorrectly blocking access to the application.
If the client's problem is specifically with the login prompt, then rule 1006 seems the most likely culprit. Changing the action from "Block" to "Allow" for rule 1006 could potentially resolve the client's issue. The rule should be carefully reviewed and updatedto ensure legitimate traffic is not being blocked while still protecting against unauthorized access.

NEW QUESTION 30
Which of the following best describes a system that keeps all different versions of a software separate from each other while giving access to all of the versions?

A. Code documentation
B. Code control
C. Code repository
D. Code versioning

Answer: D

Explanation:
A system that keeps all different versions of software separate from each other while providing access to all of the versions is best described by Code versioning. Code versioning systems, such as Git, allow developers to keep track of changes, revert to previous states, and manage multiple versions of codebases.References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 33
A CI/CD pipeline is used to deploy VMs to an laaS environment. Which of the following can be used to harden the operating system once the VM is running?

A. Docker
B. Kubernetes
C. Git

D. Ansible

Answer: D

Explanation:
Ansible can be used to harden the operating system once the VM is running. It is an automation tool that can configure systems, deploy software, and orchestrate more advanced IT tasks such as continuous deployments or zero downtime rolling updates.References: Ansible and other configuration management tools are part of the cloud management strategies discussed in the CompTIA Cloud+ certification material.

NEW QUESTION 35
A company has one cloud-based web server that is prone to downtime during maintenance. Which ot the following should the cloud engineer add to ensure high availability?

A. A redundant web server behind a load balancer
B. A backup cloud web server
C. A secondary network link to the web server
D. An autoscaling feature on the web server

Answer: A

Explanation:
Adding a redundant web server behind a load balancer is the solution that will ensure high availability. If one server goes down for maintenance, the other can take over, ensuring that the web service remains available without interruption.References: High availability concepts, including the use of load balancers and redundant servers, are part of cloud infrastructure design as per CompTIA Cloud+.

NEW QUESTION 36
A customer relationship management application, which is hosted in a public cloud IaaS network, is vulnerable to a remote command execution vulnerability. Which of the following is the best solution for the security engineer to implement to prevent the application from being exploited by basic attacks?

A. IPS
B. ACL
C. DLP
D. WAF

Answer: D

Explanation:
A Web Application Firewall (WAF) is the best solution to implement for a public cloud IaaS hosted customer relationship management application vulnerable to remote command execution attacks. WAFs are designed to monitor, filter, and block malicious HTTP/S traffic to and from a web application to protect against various application layer attacks, including remote command execution. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Security in the Cloud

NEW QUESTION 39
A cloud solutions architect needs to design a solution that will collect a report and upload it to an object storage service every time a virtual machine is gracefully or non-gracefully stopped. Which of the following will best satisfy this requirement?

A. An event-driven architecture that will send a message when the VM shuts down to a log- collecting function that extracts and uploads the log directly from the storage volume
B. Creating a webhook that will trigger on VM shutdown API calls and upload the requested files from the volume attached to the VM into the object-defined storage service
C. An API of the object-defined storage service that will scrape the stopped VM disk and self-upload the required files as objects
D. A script embedded on the stopping VM's OS that will upload the logs on system shutdown

Answer: A

Explanation:
An event-driven architecture is suited for this scenario, where an event (like a VM shutdown) triggers a function to execute specific tasks (log collection and upload). This approach is efficient and ensures that the logs are collected and uploaded to an object storage service every time the VM is stopped, regardless of whether it is a graceful or non- graceful shutdown. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Delivery Implementations

NEW QUESTION 42
A cloud administrator shortens the amount of time a backup runs. An executive in the company requires a guarantee that the backups can be restored with no data loss. Which of th€ following backup features should the administrator lest for?

A. Encryption
B. Retention
C. Schedule
D. Integrity

Answer: D

Explanation:
To guarantee that backups can be restored with no data loss, the administrator should test for data integrity. This ensures that the data has not been altered during the backup process and that it can be restored to its original state.References: Backup integrity is a critical aspect of data management and protection, which falls under the best practices for backups and restoration in the CompTIA Cloud+ curriculum.

NEW QUESTION 46

Which of the following is a direct effect of cloud migration on an enterprise?

A. The enterprise must reorganize the reporting structure.
B. Compatibility issues must be addressed on premises after migration.
C. Cloud solutions will require less resources than on-premises installations.
D. Utility costs will be reduced on premises.

Answer: D

Explanation:
Cloud migration typically results in a reduction of on-premises utility costs because the physical infrastructure requirements, such as power and cooling, are transferred to the cloud provider. This shift can lead to significant savings in utility expenses for the enterprise. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274- 282-2)

NEW QUESTION 48
An administrator is setting up a cloud backup solution that requires the following features:
• Cost effective
• Granular recovery
• Multilocation
Which of the following backup types best meets these requirements?

A. Off-site, full, incremental, and differential
B. Cloud site, full, and differential
C. On-sit
D. full, and incremental
E. On-sit
F. full, and differential

Answer: A

Explanation:
An off-site cloud backup solution that offers full, incremental, and differential backups would best meet the requirements of being cost-effective, allowing granular recovery, and supporting multi-location storage. This combination allows for comprehensive backup strategies that can be tailored to the company's needs while optimizing storage costs.References: Backup strategies, including full, incremental, and differential backups, are an integral part of data management and protection strategies discussed in the CompTIA Cloud+ objectives.

NEW QUESTION 49
Which of the following network protocols is generally used in a NAS environment?

A. BGP
B. RDP
C. TCP/IP
D. iSCSI

Answer: C

Explanation:
The network protocol generally used in a NAS (Network Attached Storage) environment is TCP/IP (Transmission Control Protocol/Internet Protocol). NAS devices are accessed over a network rather than being directly connected to the computer, and they utilize the TCP/IP protocol to enable this network communication.References: Understanding of networking protocols, including TCP/IP in the context of NAS environments, is part of the foundational networking knowledge for cloud services in CompTIA Cloud+.

NEW QUESTION 53
A cloud administrator learns that a major version update. 4.6.0. is available for a business- critical application. The application is currently on version 4.5.2. with additional minor versions 3, 4, and 5 available. The administrator needs to perform the update while minimizing downtime. Which of the following should the administrator do first?

A. Apply the minor updates and then restart the machine before applying the major update.
B. During off hours, decommission the machine and create a new one directly on major update 4.6.0.
C. Stop the service and apply the major updates directly.
D. Create a test environment and apply the major update

Answer: D

Explanation:
The first step the administrator should take is to create a test environment and apply the major update there. This allows for testing the new version without impacting the production environment, thus minimizing downtime and the potential for unexpected issues.References: Creating test environments and conducting thorough testing before applying updates in production is a risk mitigation strategy covered under cloud deployment and operations in the CompTIA Cloud+ certification.

NEW QUESTION 58
A cloud deployment uses three different VPCs. The subnets on each VPC need to communicate with the others over private channels. Which of the following will achieve this objective?

A. Deploying a load balancer to send traffic to the private IP addresses
B. Creating peering connections between all VPCs
C. Adding BGP routes using the VPCs' private IP addresses
D. Establishing identical routing tables on all VPCs

Answer: B

Explanation:
To allow subnets on different VPCs to communicate with each other over private channels, the cloud engineer should create peering connections between all the VPCs. VPC Peering allows networks to connect and route traffic using private IP addresses without the need for gateways, VPN connections, or separate physical hardware. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 61
A cloud engineer hardened the WAF for a company that operates exclusively in North America. The engineer did not make changes to any ports, and all protected applications have continued to function as expected. Which of the following configuration changes did the engineer most likely apply?

A. The engineer implemented MFA to access the WAF configurations.
B. The engineer blocked all traffic originating outside the region.
C. The engineer installed the latest security patches on the WAF.
D. The engineer completed an upgrade from TLS version 1.1 to version 1.3.

Answer: B

Explanation:
Given that the WAF was hardened without changing any ports and all protected applications continued to function as expected, it is most likely that the engineer blocked all traffic originating outside of North America, which is the company's operating region. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security Best Practices

NEW QUESTION 65
Which of the following service options would provide the best availability for critical applications in the event of a disaster?

A. Edge computing
B. Cloud bursting
C. Availability zones
D. Multicloud tenancy

Answer: C

Explanation:
Availability zones provide the best availability for critical applications in the event of a disaster. They are distinct locations within a cloud region that are engineered to be isolated from failures in other availability zones, thus providing redundancy and failover capabilities, which is essential for maintaining high availability of critical applications.References: The concept of availability zones and their importance in disaster recovery and high availability is covered under the domain of Management and Technical Operations in the CompTIA Cloud+ objectives.

NEW QUESTION 67
Which of the following can reduce the risk of CI/CD pipelines leaking secrets?

A. Protected Git branches
B. Use of a VM instead of containers
C. Private image repositories
D. Canary tests

Answer: A

Explanation:
Protected Git branches help reduce the risk of CI/CD pipelines leaking secrets by imposing restrictions on who can commit to the branches, enforce status checks before merging, and prevent unauthorized access or changes to sensitive information, such as API keys, passwords, and secret tokens. This ensures that only approved changes can be made to the codebase, and sensitive information is safeguarded.

NEW QUESTION 72
A cloud security analyst is looking for existing security vulnerabilities on software applications. Which of the following describes this vulnerability management phase?

A. Analyze
B. Report
C. Remediation
D. identification

Answer: D

Explanation:
The phase of vulnerability management that involves looking for existing security vulnerabilities on software applications is known as 'Identification'. This step precedes analysis, reporting, and remediation, focusing on discovering known and unknown vulnerabilities within the system or software to assess the security posture effectively.

NEW QUESTION 75
Which of the following compute resources is the most optimal for running a single scripted task on a schedule?

A. Bare-metal server
B. Managed container
C. Virtual machine
D. Serverless function

Answer: D

Explanation:
Serverless functions are ideal for running scripted tasks on a schedule because they can be triggered by events, run the task, and then shut down, incurring costs only for the actual compute time used. This eliminates the need for a continuously running server and is optimal for sporadic or scheduled tasks. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 76
A cloud architect attempts to modify a protected branch but is unable to do so. The architect receives an error indicating the action cannot be completed. Which of the following should the architect try instead"

A. Adding a new remote
B. Creating a pull request
C. Merging the branch
D. Rebasing the branch

Answer: B

Explanation:
When unable to modify a protected branch directly, the recommended approach is to create a pull request. This allows changes to be reviewed and approved by authorized personnel before being merged into the protected branch, maintaining code integrity and compliance with the project's workflow and policies.

NEW QUESTION 81
A developer is deploying a new version of a containerized application. The DevOps team wants:
• No disruption
• No performance degradation
* Cost-effective deployment
• Minimal deployment time
Which of the following is the best deployment strategy given the requirements?

A. Canary
B. In-place
C. Blue-green
D. Rolling

Answer: C

Explanation:
The blue-green deployment strategy is the best given the requirements for no disruption, no performance degradation, cost-effective deployment, and minimal deployment time. It involves maintaining two identical production environments (blue and green), where one hosts the current application version and the other is used to deploy the new version. Once testing on the green environment is complete, traffic is switched from blue to green, ensuring a seamless transition with no downtime.References: Understanding various cloud deployment strategies, such as blue-green deployments, is essential for managing cloud environments effectively, as highlighted in the CompTIA Cloud+ objectives, to ensure smooth and efficient application updates.

NEW QUESTION 86
An organization's critical data was exfiltrated from a computer system in a cyberattack. A cloud analyst wants to identify the root cause and is reviewing the following security logs of
a software web application:
"2021/12/18 09:33:12" "10. 34. 32.18" "104. 224. 123. 119" "POST /
login.php?u=administrator&p=or%201%20=1"
"2021/12/18 09:33:13" "10.34. 32.18" "104. 224. 123.119" "POST /login.
php?u=administrator&p=%27%0A"
"2021/12/18 09:33:14" "10. 34. 32.18" "104. 224. 123. 119" "POST /login.
php?u=administrator&p=%26"
"2021/12/18 09:33:17" "10.34. 32.18" "104. 224. 123.119" "POST /
login.php?u=administrator&p=%3B"
"2021/12/18 09:33:12" "10.34. 32. 18" "104. 224. 123. 119" "POST / login.
php?u=admin&p=or%201%20=1"
"2021/12/18 09:33:19" "10.34.32.18" "104. 224. 123.119" "POST / login.
php?u=admin&p=%27%0A"
"2021/12/18 09:33:21" "10. 34. 32.18" "104.224. 123.119" "POST / login.
php?u=admin&p=%26"
"2021/12/18 09:33:23" "10. 34. 32.18" "104. 224. 123.119" "POST / login.
php?u=admin&p=%3B"
Which of the following types of attacks occurred?

A. SQL injection
B. Cross-site scripting
C. Reuse of leaked credentials
D. Privilege escalation

Answer: A

Explanation:
The security logs of the software web application show patterns that are typical of an SQL injection attack. This is evidenced by the inclusion of SQL syntax in the user input fields in an attempt to manipulate the database. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security Threats

NEW QUESTION 89
Which of the following is an auditing procedure that ensures service providers securely manage the data to protect the interests of the organization and the privacy

of its clients?

A. CIS
B. ITIL
C. SOC2
D. ISO 27001

Answer: C

Explanation:
SOC2 (Service Organization Control 2) is an auditing procedure that ensures service providers securely manage data to protect the interests of an organization and the privacy of its clients. SOC2 is specifically designed for service providers storing customer data in the cloud, making it pertinent for data management and privacy.References: SOC2 and its role in auditing and ensuring secure data management by cloud service providers are part of the compliance standards and regulations included in the CompTIA Cloud+ certification material.

NEW QUESTION 92
An organization's internal security team mandated that public cloud resources must be accessible only by a corporate VPN and not by direct public internet access. Which of the following would achieve this objective?

A. WAF
B. ACL
C. VPC
D. SSH

Answer: C

Explanation:
A Virtual Private Cloud (VPC) allows users to create a secluded section of the public cloud where resources can be launched in a defined virtual network. This enables an organization to have a section ofthe cloud that is secured and isolated from the public internet, thus, access to public cloud resources can be restricted to only a corporate VPN. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security

NEW QUESTION 93
The performance of an e-commerce website decreases dramatically during random periods. The IT team is evaluating available resources to mitigate the situation. Which of the following is the best approach to effectively manage this scenario'?

A. Migrating to a dedicated host
B. Purchasing additional servers
C. Scheduling resource allocation
D. Configuring automatic elasticity

Answer: D

Explanation:
Configuring automatic elasticity is the best approach to manage an e- commerce website that experiences random performance drops due to variable traffic. Automatic elasticity enables the cloud resources to scale up or down automatically based on the current load, ensuring consistent performance even during unexpected traffic surges.References: The concept of automatic elasticity is part of the cloud management and technical operations content in the CompTIA Cloud+ curriculum.

NEW QUESTION 94
A cloud solutions architect is designing a VM-based solution that requires reducing the cost as much as possible. Which of the following solutions will best satisfy this requirement?

A. Using ephemeral storage on replicated VMs
B. Creating Spot VMs in one availability zone
C. Spreading the VMs across different regions
D. Using provisioned IOPS storage

Answer: B

Explanation:
Using Spot VMs is a cost-effective solution as these are available at significantly reduced prices compared to standard instances. Spot VMs are ideal for workloads that can tolerate interruptions and are a way to take advantage of unused cloud capacity.References: The concept of Spot VMs and their cost benefits are included in the financial aspects of managing cloud resources, as per the CompTIA Cloud+ certification guidelines.

NEW QUESTION 98
An engineer made a change to an application and needs to select a deployment strategy that meets the following requirements:
• Is simple and fast
• Can be performed on two Identical platforms
Which of the following strategies should the engineer use?

A. Blue-green
B. Canary
C. Rolling
D. in-place

Answer: A

Explanation:

The blue-green deployment strategy is ideal for scenarios where simplicity and speed are crucial. It involves two identical production environments: one (blue) hosts the current application version, while the other (green) is used to deploy the new version. Once testing is completed on the green environment and it's ready to go live, traffic is switched from blue to green, ensuring a quick and efficient rollout with minimal downtime. This method allows for immediate rollback if issues arise, by simply redirecting the traffic back to the blue environment.References: CompTIA Cloud+ material emphasizes the importance of understanding various cloud deployment strategies, including blue-green, and their application in real-world scenarios to ensure efficient and reliable software deployment in cloud environments.

NEW QUESTION 102
A group of cloud administrators frequently uses the same deployment template to recreate a cloud-based development environment. The administrators are unable to go back and review the history of changes they have made to the template. Which of the following cloud resource deployment concepts should the administrator start using?

A. Drift detection
B. Repeatability
C. Documentation
D. Versioning

Answer: D

Explanation:
Versioning is a concept that allows cloud administrators to keep track of the history of changes made to deployment templates or any other configuration file. By using version control systems, they can review previous versions, roll back to earlier configurations if necessary, and understand the evolution of the deployment template over time. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274-282-2)

NEW QUESTION 104
A company's website suddenly crashed. A cloud engineer investigates the following logs:

```
webbapp_access.log
...
2023-04-03 16:45:00 GET /home?x=213
2023-04-03 16:45:01 GET /home?x=6544
2023-04-03 16:45:02 GET /home?x=52455
2023-04-03 16:45:03 GET /home?x=56
2023-04-03 16:45:04 GET /home?x=7895
...
2023-04-03 16:47:00 GET /home?x=3986 502
2023-04-03 16:47:01 GET /home?x=2461 502
```

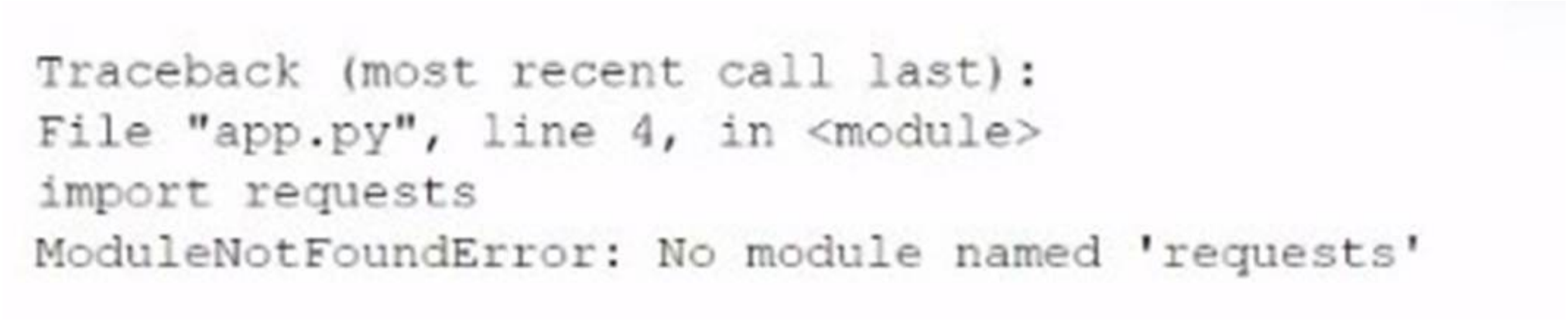
Which of the following is the most likely cause of the issue?

A. SQL injection
B. Cross-site scripting
C. Leaked credentials
D. DDoS

Answer: D

Explanation:
The logs indicate a sudden surge in access requests to the website's homepage, followed by 502 errors, which are indicative of server overload or failure to handle incoming requests. This pattern is typical of a Distributed Denial of Service (DDoS) attack, where multiple compromised systems flood the target with traffic, exceeding its capacity to handle requests, leading to service disruption.

NEW QUESTION 107
A developer is building a new application version using a CI/CD pipeline. The developer receives the following error message log when the build fails:



Which of the following is the most likely cause of this failure?

A. Incorrect version
B. Test case failure
C. Broken build pipeline
D. Dependency issue

Answer: D

Explanation:
The error message indicates that the 'requests' module, which is a dependency, is not found. The failure is most likely due to the 'requests' library not being installed or not included in the environment where the application is running.References: Dependency management is a crucial part of maintaining a CI/CD pipeline, a topic included in the CompTIA Cloud+ examination objectives.

NEW QUESTION 108
Users have been reporting that a remotely hosted application is not accessible following a recent migration. However, the cloud administrator is able to access the application from
the same site as the users. Which of the following should the administrator update?

A. Cipher suite
B. Network ACL
C. Routing table
D. Permissions

Answer: C

Explanation:
Since the cloud administrator can access the application from the same site but users cannot, it suggests a possible issue with the network routing. The routing table may need to be updated to ensure that traffic from the users' location is correctly directed to the new location of the remotely hosted application after the migration.References: CompTIA Network+ Certification Study Guide by Glen E. Clarke.

NEW QUESTION 113
A cloud engineer is designing a cloud-native, three-tier application. The engineer must adhere to the following security best practices:
• Minimal services should run on all layers of the stack.
• The solution should be vendor agnostic.
• Virealization could be used over physical hardware.
Which of the following concepts should the engineer use to design the system to best meet these requirements?

A. Virtual machine
B. Micro services
C. Fan-out
D. Cloud-provided managed services

Answer: B

Explanation:
Microservices architecture is the most suitable design principle that aligns with the security best practices mentioned. It involves developing a suite of small services, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API. This architecture minimizes the services running on each layer, allows for vendor-agnostic solutions,and is well-suited for virtualization over physical hardware.References: Microservices as an architectural approach is discussed in the context of cloud-native applications within the CompTIA Cloud+ material.

NEW QUESTION 116
Which of the following vulnerability management concepts is best defined as the process of discovering vulnerabilities?

A. Scanning
B. Assessment
C. Remediation
D. Identification

Answer: D

Explanation:
In vulnerability management, 'Identification' is the concept best defined as the process of discovering vulnerabilities. This step is crucial as it involves detecting vulnerabilities in systems, software, and networks, which is the first step in the vulnerability management process before moving on to assessment, remediation, and reporting.

NEW QUESTION 120

A cloud service provider requires users to migrate to a new type of VM within three months. Which of the following is the best justification for this requirement?

A. Security flaws need to be patched.
B. Updates could affect the current state of the VMs.
C. The cloud provider will be performing maintenance of the infrastructure.
D. The equipment is reaching end of life and end of support.

Answer: D

Explanation:
The best justification for a cloud service provider requiring users to migrate to a new type of VM within a specific time frame is that the equipment is reaching end of life and end of support (EOL/EOS). This means that the older type of VM will no longer receive updates or support, which could include important security patches, so it is necessary to move to newer VM types to maintain security and performance. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 122
A company migrated its CRM system to a SaaS solution. The security team is updating the RAG matrix for the newly migrated CRM. Given the following table:

	Data-center security	CRM software security	CRM server patching	CRM development life cycle
Customer	C,I	I	A, I	A,C,I
CSP	R,A	R,A,C	R,C	R

Which of the following responsibility assignments best aligns with the shared responsibility model for the new CRM?

A. Data-center security
B. CRM software security
C. CRM server patching
D. CRM development life cycle

Answer: A

Explanation:
For the newly migrated SaaS CRM, the responsibility assignment that best aligns with the shared responsibility model is data-center security. In a SaaS model, the cloud service provider (CSP) is responsible for the security of the infrastructure, including data centers, while the customer is typically responsible for the data and possibly the user access management.References: The shared responsibility model and its implications for different service models are foundational concepts included in the CompTIA Cloud+ certification, under the domain of Governance, Risk, Compliance, and Security.

NEW QUESTION 127
A security analyst confirms a zero-day vulnerability was exploited by hackers who gained access to confidential customer data and installed ransomware on the server Which of the following steps should the security analyst take? (Select two).

A. Contact the customers to inform them about the data breach.
B. Contact the hackers to negotiate payment lo unlock the server.
C. Send a global communication to inform all impacted users.
D. Inform the management and legal teams about the data breach
E. Delete confidential data used on other servers that might be compromised.
F. Modify the firewall rules to block the IP addresses and update the ports.

Answer: AD

Explanation:
After a zero-day exploit resulting in a data breach and ransomware installation, it is critical to inform affected customers about the breach and the potential impact on their data. Additionally, the management and legal teams should be notified to handle the situation in compliance with regulatory requirements and to coordinate an appropriate response.References: Handling security incidents and communication strategies after a data breach are crucial elements of the governance and risk compliance domains in CompTIA Cloud+.

NEW QUESTION 128
A company is required to save historical data for seven years. A cloud administrator implements a script that automatically deletes data older than seven years. Which of the following concepts best describes why the historical data is being deleted?

A. End of life
B. Data loss prevention
C. Cost implications
D. Tiered storage for archiving

Answer: A

Explanation:

Deleting historical data older than seven years as described is an example of data end of life (EOL) policies in action. These policies dictate when data is no longer needed or relevant and should be securely disposed of, often for compliance, legal, or cost- saving reasons.
References: CompTIA Cloud+ resources and data management strategies

NEW QUESTION 130
A company uses containers to implement a web application. The development team completed internal testing of a new feature and is ready to move the feature to the production environment. Which of the following deployment models would best meet the company's needs while minimizing cost and targeting a specific subset of its users?

A. Canary
B. Blue-green
C. Rolling
D. In-place

Answer: A

Explanation:
The canary deployment model is an approach where a new feature or service is rolled out to a small subset of users before being deployed widely. This method allows the company to test the impact of the new feature in the production environment with a limited scope, minimizing risk and potential cost implications if issues arise. This approach contrasts with blue-green deployments, which involve switching between two identical environments; rolling deployments, which gradually update all instances; and in- place deployments, which update the current environment. The canary model is particularly suited for targeting specific user groups and gathering feedback before a full rollout.

NEW QUESTION 132
Once a change has been made to templates, which of the following commands should a cloud architect use next to deploy an IaaS platform?

A. git pull
B. git fetch
C. git commit
D. git push

Answer: D

Explanation:
After making changes to templates, a cloud architect should use thegit push command to deploy an IaaS platform. This command is used to upload the local repository content to a remote repository, making the new or changed templates available for the next deployment.References: Version control practices and commands, such as using git for IaaS template management, are covered under the best practices for cloud deployments in the CompTIA Cloud+ certification.

NEW QUESTION 135
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