1. Each Cloud Region can have multiple Zones (also known as Availability Zones). What are Zones? **1 / 1 point**

- ○ Geographic area or region where cloud provider's infrastructure is clustered
- ○ Single shared point of failure
- ◉ Unique physical locations with one or more data centers
- ○ Standardized containers of computing resources

Correct
Zones, or Availability Zones, are distinct locations with one or more data centers with their own power, cooling, and networking resources.

2. Is it possible to run completely different operating systems on Virtual Machines (VMs) that are on a single host? If yes, what makes this possible? **1 / 1 point**

- ○ No, it is not possible—VMs are software-based versions of a single host. They cannot have different environments from one another.
- ○ No, it is not possible—A single host can only work as one single virtual environment, and can, therefore, have only one environment.
- ○ Yes, Containerization makes it possible—to have VMs that are unique physical entities, so you can have completely different Operating Systems on them.
- ◉ Yes, Virtualization makes it possible— to have VMs, running different operating systems, on a single host.

Correct
Each VM works like an independent physical entity with its own Operating System, runtime environments and applications.

3. Which of the following are examples of single-tenant compute environments in the Cloud? *Select two.* **1 / 1 point**

3. Which of the following are examples of single-tenant compute environments in the Cloud? *Select two.* **1 / 1 point**

- [x] Bare Metal servers

Correct
Bare Metal servers are single-tenant physical hosts that offer a highly customizable environment for intensive workloads.

- [ ] Reserved virtual server
- [x] Dedicated host

Correct
Dedicated hosts offer single-tenant isolation, which means only your VMs run on a given host.

- [ ] Transient virtual servers

4. Which of these scenarios is ideal for the use of bare metal servers, as opposed to virtual servers? *Select two.* **1 / 1 point**

- [x] Huge performance and strict security and compliance requirements

Correct
Bare metal servers are intended for high performance use in highly secure and isolated environments. Clients have full access and control of bare metal servers because they are dedicated for their use.

- [ ] Workloads that require limited throughput and performance
- [x] CPU and I/O intensive workloads

Correct
Since bare metal servers are dedicated and fully customizable, they can do what a customer wants in the most demanding environments.

- [ ] Low cost to use

5. What are some key differences between Containers and Virtual Machines? *Select two.* **1 / 1 point**

- [ ] Even though each container uses the same OS as the host OS, it still needs to have its own copy of the OS, while a virtual machine leverages the resources of the host OS
- [x] Containers can use the same OS as the host, while a virtual machine needs its own copy of the OS, which can also be different from the host OS

Correct
Containers leverage the resources of the host OS, while VMs are set up to work as independent machines and can run an OS that is different from the host OS.

- [x] Containers are more lightweight as compared to virtual machines

Correct
A container includes only the executables with their dependencies, while each virtual machine needs to not only have a virtual copy of the hardware but also the OS.

- [ ] Containers are executable units of software while each virtual machine is a distinct physical entity

6. There are four types of cloud storage available. Which storage type is ephemeral or non-persistent? **0 / 1 point**

- ◯ Direct Attached storage

7. What makes File storage an ideal solution for scenarios where shared storage is needed? **1 / 1 point**

- (●) File storage can be mounted on multiple compute nodes at the same time
- ( ) Mounted from remote storage appliances
- ( ) File Storage is mounted to compute nodes via an ethernet network
- ( ) Its consistently high speed

Correct
The ability for File Storage to be mounted to multiple compute nodes at a time make it an ideal solution for shared storage requirements.

8. Which of these scenarios are best suited for Block Storage? *Select two.* **1 / 1 point**

- [x] Workloads that need low-latency storage

Correct
Block storage is accessed via a dedicated network of fibres through which signals move at high speed, consistently. This makes block storage suitable for low latency workloads.

- [ ] Workloads that need disk sharing between compute nodes
- [x] Applications that need consistent fast access to disk, such as databases

Correct
Fibre optic networks move traffic at consistently high speeds, making it ideal for applications that need consistent and fast access.

- [ ] Low cost is a consideration

9. Which of these are features of Object Storage? *Select two.* **0 / 1 point**

- [ ] Object Storage can be mounted on multiple compute nodes via an ethernet network
- [ ] Storage is attached to compute nodes using a fibre network
- [x] You can directly use Object Storage without attaching it to a compute node

Correct
You don't need an underlying compute node to connect to object storage, rather you can access it from anywhere using an API.

- [ ] Object storage is effectively infinite

You didn't select all the correct answers

10. What is the main benefit of a Content Delivery Network (CDN)? **1 / 1 point**

- ( ) Enhanced control over network traffic by routing traffic to specified resources
- ( ) Network topology
- (•) Speed, it makes your website faster by serving files from a location closer to the user.
- ( ) Distribute tasks, workloads, and network traffic

Correct
CDNs reduce the amount of distance between the user and the content, or the server providing the content. CDN end-points are placed close to every location where users exist to reduce the time it takes for each user to access the website.