

## ✓ Congratulations! You passed!

Grade received **100%** To pass 60% or higher

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1. The infrastructure layer is the foundation of the cloud and consists of physical resources. Where do these physical resources reside?

1 / 1 point

- ☐ Compute, Storage, and Networking Resources
- ☐ Virtual Servers, Bare Metal Servers, and Serverless computing resources
- ☐ In a warehouse that houses a centralized mainframe server
- ☒ Regions, Zones, and Data Centers

✓ **Correct**

The physical resources of a cloud's IT infrastructure are housed in data centers, that are located with Availability Zones that are clustered within Regions.

2. Virtualization is the process of creating a software-based or virtual version of something. What is typically created with virtualization in the cloud?

1 / 1 point

- ☐ Windows, Linux, UNIX
- ☒ Servers, storage devices, networking resources, and applications
- ☐ VMware ESX and ESXI, Microsoft Hyper-V, open-source KVM
- ☐ Oracle VirtualBox, VMware Workstation

✓ **Correct**

Virtualization is the process of creating a software-based or virtual version of physical resources, such as Virtual Servers or VMs, and is the foundation of cloud computing.

3. Which type of Virtual Machine (VM) takes advantage of unused capacity in data centers at a much lower cost than regular VMs of similar sizes?

1 / 1 point

- ☐ Reserved virtual servers
- ☒ Transient or Spot VMs
- ☐ Shared or Public Cloud VMs
- ☐ Dedicated hosts

✓ **Correct**

Transient or Spot VMs offer unused capacity to users as lower costs—they deprovision and reclaim capacity as needed.

4. Why do bare metal servers take longer to provision than virtual servers?

1 / 1 point

- ☐ They're multi-tenant servers, and all tenants must help configure them
- ☐ Customer configures the physical servers
- ☐ GPUs for data analytics are hard to configure and provision
- ☒ They are physical servers that can be customized to specified capacity

✓ **Correct**

Bare-metal servers are physical machines and take longer to provision than virtual servers as physical resources with specified capacity may need to be configured by the cloud provider before they are made available to users.

5. Which part of a logically segmented cloud network is the main area where security is implemented?

1 / 1 point

- ☐ Networking spaces
- ☒ Subnets
- ☐ Logical instances of networking elements

☐ Load balancers

✓ **Correct**

Subnets are the smaller segments of networking spaces where cloud resources are deployed and security is implemented.

6. What benefits do runtime engines provide to containers?

1 / 1 point

☐ Allows multiple OS and applications to run simultaneously and share resources

☐ Serves as an interface between the VM and underlying physical hardware

☒ Share the operating system (OS) with other containers

☐ Uses device drivers targeting the abstract machine

✓ **Correct**

Runtime engine acts as a conduit to share an OS with other containers on the same computing system.

7. There are four main types of cloud storage available. Which storage type is sometimes called "Local Storage"?

1 / 1 point

☐ Object Storage

☐ File Storage

☒ Direct Attached

☐ Block Storage

✓ **Correct**

Direct Attached storage is sometimes referred to as 'Local Storage' because it's presented directly to a cloud-based server and is effectively either within the host server chassis or within the same rack.

8. What is File Storage sometimes called?

1 / 1 point

☐ Ethernet

☒ NFS

☐ COS

☐ Remote storage appliances

✓ **Correct**

File Storage is mounted to compute nodes via an ethernet network and is sometimes referred to as 'Network File Storage' or NFS.

9. Which of these statements is true of File Storage but not Object Storage? *Select two.*

1 / 1 point

☒ Storage is attached to compute nodes using an ethernet network

✓ **Correct**

Block storage is attached via a high-speed fibre network

☐ Include data encryption at rest and in transit

☐ Highly resilient and available

☒ Based on the load, speed of the connecting network can be inconsistent

✓ **Correct**

Block storage is attached via a high-speed fibre network, which makes the speed of the connecting network consistent.

10. Which of the following is NOT a good fit for Object Storage?

1 / 1 point

☐ Files or objects that are static

☐ Data that does not require fast read and write speeds

☒ Operating systems or applications like databases

☐ Storage needs are finite and can be pre-defined



**Correct**

Object storage is not suitable for running operating systems, databases, or anything else where the contents of the file changes.

11. What is a standard tier bucket in Object Storage typically used for?

1 / 1 point

- ☐ Storing data that is typically accessed only once or twice a year
- ☒ Storing objects that are frequently accessed
- ☐ Storing objects that are only accessed once or twice a month or less
- ☐ Supporting applications that need consistent fast access to disk, such as databases



**Correct**

A standard tier bucket is where you would store frequently accessed objects. This tier tends to have the highest per gigabyte cost associated with it.

12. What is a Content Delivery Network (CDN)?

1 / 1 point

- ☐ A network node
- ☐ A network link
- ☒ A distributed server network
- ☐ Network topology



**Correct**

A CDN is a distributed server network that delivers temporarily stored or cached copies of website content to users based on the user's geographic location.