

Midterm Quiz

Due Nov 6 at 11:59pm**Points** 40**Questions** 40**Available** Nov 2 at 8pm - Nov 10 at 11:59pm**Time Limit** 80 Minutes**Allowed Attempts** 2

Instructions

- The test will be available until 11:59PM Monday, November 6, 2023
- There are 40 questions
- It is limited to 80 minutes
- Most are multiple choice, but also fill in the blank, and T/F, spelling counts for the fill-in-the-blank but I will not penalize for incorrectly spelled answers if I can discern that is it the intended correct answer. I will have to manually adjust scores if spelling errors occur.

[Take the Quiz Again](#)

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	35 minutes	31 out of 40

Score for this attempt: **31** out of 40

Submitted Nov 10 at 11:27am

This attempt took 35 minutes.

Question 1

0 / 1 pts

In the NIST conceptual architecture, the three major subdivisions of the service orchestration capability are: ,

, and

.

Answer 1:

You Answered

SaaS

Correct Answer

service layer

Correct Answer

service

Answer 2:

You Answered

PaaS

Correct Answer

abstraction

Correct Answer

resource abstraction

Correct Answer

resource abstraction and control

Answer 3:

You Answered

IaaS

Correct Answer

physical

Correct Answer

physical resource

Correct Answer

physical resource layer

Correct Answer

physical layer

Question 2

1 / 1 pts

What distinguishes an entity as a cloud service owner?

☐

Cloud service owners are the entities who use the cloud services to deliver business outcomes.

☐

Cloud service owners own the physical infrastructure that provides the cloud services.



Cloud service owners are the entities that set the terms of the service level agreements (SLAs).

Correct!

Cloud service owners are the entities who legally own the cloud services.

Question 3**1 / 1 pts**

A specific cloud deployment has been created for a financial application that multiple organizations can share. What type of cloud deployment model is this describing?

☐ Private**Correct!**☒ Community☐ Hybrid☐ Public**Question 4****1 / 1 pts**

A general, collective term referring to the growing diversity of services made available via cloud computing.

Correct!☒ XaaS☐ IaaS☐ PaaS☐ SaaS

Question 5**1 / 1 pts**

Which cloud service model allows the cloud consumer to outsource responsibility for the organization's infrastructure to an external cloud provider?

Correct!☒ IaaS☐ SaaS☐ CaaS☐ PaaS**Question 6****1 / 1 pts**

Which cloud service model allows an organization to utilize enterprise-level VoIP, VPNs, PBX, and unified communications without having to purchase their own infrastructure?

☐ BPaaS☐ SaaS**Correct!**☒ CaaS☐ IaaS**Question 7****1 / 1 pts**

Which cloud deployment model is owned by a single organization and is implemented behind the organization's firewall?

- ☐ Hybrid cloud
- ☐ Public cloud
- ☐ Community cloud
- ☒ Private cloud

Correct!

Question 8

1 / 1 pts

Which of the following capabilities automates day-to-day administrative tasks and provides an automated way to manage all aspects of a cloud environment?

- ☒ Orchestration
- ☐ Virtualization
- ☐ Elasticity
- ☐ Migration

Correct!

Question 9

1 / 1 pts

This characteristic of a mature cloud offering allows an organization to automatically provision and de-provision processing, memory, and storage resources to meet the demands of the environment.

- ☐ Orchestration

Correct!

- ☐ Chargeback
- ☒ Elasticity
- ☐ Ubiquitous access

Question 10**1 / 1 pts**

Which of the following is considered a high-performance storage device that contains no moving parts?

Correct!

- ☒ SSD
- ☐ Tape
- ☐ USB drive
- ☐ HDD

Question 11**1 / 1 pts**

Which of the following storage devices is used primarily for off-site storage and archiving of data?

Correct!

- ☐ SSD
- ☐ USB drive
- ☐ HDD
- ☒ Tape

Question 12**1 / 1 pts**

You have been tasked with making an organization's data highly available. Which of the following solutions would you use to combine multiple hard disk drives into a single logical unit and thereby distribute data across the hard disk drives for improved performance and increased security?

☐ Data tiering☒ RAID☐ Rotational Media☐ SSD**Correct!****Question 13****1 / 1 pts**

According to the NIST definition of Cloud Computing, the offering must use a network of remote servers hosted on the internet.

☐ True☒ False**Correct!****Question 14****1 / 1 pts**

According to NIST the features that make an offering uniquely Cloud Computing are: on-demand self-service, broad network access, resource pooling, rapid elasticity, and _____.

Correct!

Measured Service

Correct Answers

measured service

Question 15**0 / 1 pts**

The major parts of the NIST Conceptual Model of Cloud Provider are:
Cloud Service Management, Security, Privacy, and

_____.

You Answered

Service Deployment

Correct Answers

service orchestration
orchestration

Question 16**1 / 1 pts**

Why would an IT organization decide to utilize a cloud delivery model for a set of related IT services?

☐

They want to retain full control of the administration of the IT environment.

☐

They want to retain staff that are trained in all the technologies required to support their infrastructure needs.

☐

They want to keep all their IT data on premises.

☒

They want to spend their IT costs and administrative effort on requests of the business.

Correct!

Question 17**1 / 1 pts**

Which cloud characteristic allows a consumer to dynamically increase or decrease the compute resources of their virtual environment?

☐ Ubiquitous access☐ Pay-as-you-grow☐ Shared resources☒ Elasticity**Correct!****Question 18****1 / 1 pts**

Which of the following are benefits of cloud computing. Choose two:

☐ Loss of control of the organization's data☐ Larger infrastructure to support☒ Infrastructure consolidation☒ Network isolation**Correct!****Correct!****Question 19****1 / 1 pts**

Your organization is planning to migrate systems to a cloud environment. You have been tasked with choosing which servers to migrate from a physical environment to the virtual environment. Which of the following servers would you recommend to migrate first? Choose two:

Correct!☒ A development server running a test application☐ A server running a mission-critical application**Correct!**☒

A server running an application that is neither mission-critical nor heavily utilized

☐ A highly utilized database server**Question 20****1 / 1 pts**

One of your hosting computers is having an issue. You are working from home. What protocol would you use to securely access the host from your home network?

☐ Console port**Correct!**☒ SSH☐ Telnet☐ SMTP**Question 21****1 / 1 pts**

Customer relationship management tools, email, collaboration tools, instant messaging, and other applications are purchased from a cloud provider, they are examples of:

☐ Consume (Op-Ex) versus Build (Cap-Ex)**Correct!**☒ Software as a Service

- ☐ Platform as a Service
- ☐ Small business services

Question 22**0 / 1 pts**

Your organization has asked you to research cloud offerings for use by the development team. They will need a multi-tiered application stack (presentation layer, business logic layer, and database backend). What kind of service model are they looking for?

Correct Answer

- ☐ PaaS
- ☐ IaaS
- ☐ SaaS
- ☒ XaaS

You Answered**Question 23****0 / 1 pts**

What two service models might describe an offering that specializes in the delivery of database operations?

Correct!

- ☒ PaaS
- ☐ IaaS
- ☒ SaaS

You Answered**Correct Answer**

- ☐ DBaaS

Question 24**1 / 1 pts**

Hypervisors, virtual machines, virtual data storage, and virtual network switches are examples of the way a cloud environment enables resource

_____.

- ☐ processing
- ☒ abstraction
- ☐ management
- ☐ orchestration

Correct!**Question 25****1 / 1 pts**

The cloud control component that deploys virtual machines is commonly called a:

- ☐ orchestrator
- ☐ controller
- ☒ compute node
- ☐ management server

Correct!**Question 26****0 / 1 pts**

The cloud control component that schedules virtual machine deployments among multiple compute nodes is commonly called a:

Correct Answer☐ controller node**You Answered**☒ management server☐ orchestrator☐ compute node**Question 27****1 / 1 pts**

A component of a well-designed cloud offering that permits the consumer to view usage, performance, cost, and configuration information from a single "pane of glass" is called a:

Correct!☒ dashboard☐ cockpit☐ environment manager☐ SPOG**Question 28****1 / 1 pts**

What is the cloud service called which provides authentication of users accessing the cloud?

☐ login service☐ authentication and authorization**Correct!**☒ identity service

☐ security service

Question 29**0 / 1 pts**

The strategy of migrating multiple physical servers to be managed as virtual machines is called:

You Answered

☒ virtualization

Correct Answer

☐ consolidation

☐ compression

☐ containment

Question 30**1 / 1 pts**

The formula used to figure out how many physical servers will fit on a single hosting server is:

☐ a best guess; there is no precise formula

Correct!

☒ supplied by each vendor of a physical server

☐ start small and grow over time

☐ 20:1

Question 31**0 / 1 pts**

Open source cloud controller software typically is designed to work with three hypervisors. These are, ESXi (from VMware), Xen, and:

You Answered

☒ HyperV

☐ WorkStation (from VMware)

Correct Answer

☐ KVM

☐ QEMU

Question 32

1 / 1 pts

The virtual network is enabled by virtual switches which can be found in most hypervisors.

Correct!

☒ True

☐ False

Question 33

1 / 1 pts

The controller node will communicate via message bus and/or API with abstractions of the three major components every VM is composed of. These are:

Correct!

☒ storage

Correct!

☒ compute

☐ dashboard

☐ identity☐ image store**Correct!**☒ network**Question 34****0 / 1 pts**

This is a catalog and repository for virtual machine images:

You Answered

VMRC

Correct Answers

image store

Question 35**1 / 1 pts**

In this deployment model, the provider owns, manages, and operates the physical infrastructure and controlling software.

☐ community cloud**Correct!**☒ public cloud☐ private cloud☐ hybrid cloud**Question 36****1 / 1 pts**

The _____ deployment model supports modes of operation where a private cloud consumes services from one or more public cloud offerings.

Correct!

hybrid

Correct Answers

hybrid cloud

hybrid

Question 37

0 / 1 pts

Which of these are elements of a Data Center that is housing a cloud offering? (select all that are DC elements)

Correct!

☒ generators

Correct!

☒ HVAC

You Answered

☒ uplinks

Correct!

☒ rackspace

You Answered

☒ firewalls

You Answered

☒ hypervisors

Question 38

1 / 1 pts

Which of these are the chief hardware elements that enable a network used by a cloud offering?

Correct!☒ cabling**Correct!**☒ switches**Correct!**☒ load balancers☐ disks☐ servers**Correct!**☒ routers**Question 39****1 / 1 pts**

Having more bandwidth at your internet uplink will always make your cloud offering faster.

☐ True**Correct!**☒ False**Question 40****1 / 1 pts**

Which is the most scalable, reliable, and configurable of these forms of storage?

☐ SNA☐ NAS☐ DAS**Correct!**☒ SAN

Quiz Score: **31** out of 40