

Course outline

About NPTEL

How does an NPTEL online course work?

Week 0

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Week 8

Lecture 36 : Software Defined IoT Networking- II

Lecture 37 : Cloud Computing-Fundamental

Lecture 38 : Cloud Computing-Service Model

Lecture 39 : Cloud Computing-Service Management and Security

Lecture 40 : Cloud Computing- Case Studies

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Week 08: Assignment 08

The due date for submitting this assignment has passed.

Due on 2025-09-17, 23:59 IST

Assignment submitted on 2025-09-14, 14:15 IST

1) Which of the following is true with respect to Network Virtualization?

1 point

- a. It abstracts the virtual network on a physical network
- b. It abstracts the physical network on a virtual network
- c. It is essentially a collection of physical SDN routers
- d. Network virtualization is a non-existent concept.

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

2) For rule placement at the edge with respect to Software Defined IoT, which of the following is a critical issue that is required to be addressed?

1 point

- a. Existence of IoT nodes
- b. Data through routers
- c. Mobility of end users and nodes
- d. None of the given.

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

3) Which cloud service model allows users to deploy and control their own software, including operating systems, while the provider manages the infrastructure?

1 point

- A) SaaS
- B) PaaS
- C) IaaS
- D) DBaaS

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

4) Which of the following is NOT a characteristic of Platform-as-a-Service (PaaS)?

1 point

- A) Provides tools for application deployment
- B) Requires users to manage the virtual machines
- C) Offers elastic scaling of applications
- D) Simplifies development by abstracting the infrastructure

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

5) Which essential characteristic of cloud computing refers to the ability of resources to be scaled up or down automatically?

1 point

- a. Resource pooling
- b. Broad network access
- c. Elasticity
- d. None of the given

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

6) An organization A wants to deploy a cloud infrastructure, whereby it wants to push majority of the data to a cloud whose servers can be situated anywhere within the globe, but it wants certain private data to be pushed only to cloud servers that are present on-premise and are accessible by only authenticated members of the organization. In this context which among the following deployment model should be used?

1 point

- a. Private Cloud
- b. Public Cloud
- c. Hybrid Cloud
- d. Any of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

7) A Private Cloud deployment model cannot provide IaaS but can provide PaaS.

1 point

- a. False
- b. True

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

8) What is the primary function of a Light Virtual Access Point (LVAP) in the ODIN architecture for SDN-based IoT?

1 point

- a) Acts as a firewall between user devices and access points
- b) Enables virtualization of Wi-Fi APs for per-client network control
- c) Encrypts user traffic before forwarding to the cloud
- d) Controls routing at the backbone of the network

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

9) With respect to Virtualization, if one VM runs on a hypervisor, another VM is unable to use the hypervisor.?

1 point

- a. True
- b. False

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

10) Through which of the following cloud service model, do you use an image editing application without explicitly installing the said application on your local system?

1 point

- a. SaaS
- b. PaaS
- c. IaaS
- d. DaaS

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

11) Which of the following best defines 'measured service' in cloud computing?

1 point

- a. Cloud resources are billed only annually
- b. Users must request reports manually for resource usage
- c. Cloud systems automatically control and optimize resources based on metering
- d. None of the given

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

12) With respect to Cloud security, which of the following is expected to have a higher level of security than the other in a very generic sense, on the assumption that on-premise data storage generally is more secure than off-premise data storage.

1 point

- a. Public Cloud
- b. Private Cloud

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

13) Data security and client authentication is an issue in which of the following cloud service models?

1 point

- a. SaaS
- b. SaaS and PaaS
- c. IaaS
- d. All of them

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

14) In cloud computing, the users have specific knowledge about the exact physical location of the computing hardware with respect to the cloud services.

1 point

- a. True
- b. False

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

15) GreenCloud implementation focuses most on which of the following aspects?

1 point

- a) Scalability
- b) Energy
- c) Reversibility
- d) Computation

Yes, the answer is correct.

Score: 1