



Introduction to Internet

of Things Assignment-

Week 8

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1 = 15

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**QUESTION 1:**

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

- 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.

Correct Answer: b. It abstracts the physical network on a virtual network.

Detailed Solution: Refer Lecture 36@3:57.

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**QUESTION 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?

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



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Correct Answer: c. Mobility of end users and nodes.

Detailed Solution: Refer Lecture 36@9:03.

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**QUESTION 3:**

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

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

Correct Answer: c. IaaS

Detailed Solution: Refer Lecture 38, Slide 4, concepts on IaaS.

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**QUESTION 4:**

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

- 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

Correct Answer: b. Requires users to manage the virtual machines

Detailed Solution: Refer Lecture 38, Slide 15, concepts on PaaS

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**QUESTION 5:**

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

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

Correct Answer: c. Elasticity

Detailed Answer: Refer Lecture 37, Slide 9.

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**QUESTION 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?

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

Correct Answer: c. Hybrid Cloud

Detailed Solution: Hybrid cloud deployment model supports both the features of public and private cloud. Refer lecture 37, ppt No. 18.



**QUESTION 7:**

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

- a. False
- b. True

Correct Answer: a. False

Detailed Solution: All types of cloud deployment models can provide all types of service models.

**QUESTION 8:**

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

- 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

Correct Answer: b. Enables virtualization of Wi-Fi APs for per-client network control

Detailed Answer: Refer Lecture 36, Slide 12.



**QUESTION 9:**

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

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: Refer Lecture 38@5:16.

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**QUESTION 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?

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

Correct Answer: a. SaaS

Detailed Solution: This is an example of SaaS, since you are accessing a an application as a client over the network. The actual software itself runs on some remote cloud server (Please refer Lecture 37@26:14 AND 38@13:16)



**QUESTION 11:**

Which of the following best defines ‘measured service’ in cloud computing?

- 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

Correct Answer: c. Cloud systems automatically control and optimize resources based on metering

Detailed Solution: Refer Lecture 37, Slide No 10

**QUESTION 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.

- a. Public Cloud
- b. Private Cloud

Correct Answer: b. Private Cloud

Detailed Solution: Private cloud stores data on-premise, so on this assumption, it is more secure than public cloud. Refer Lecture 39 on Cloud Security.



**QUESTION 13:**

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

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

Correct Answer: d. All of them

Detailed Solution: Security is a pertinent issue in all of the cloud service models, which includes SaaS,

PaaS and IaaS. Refer to any standard discussion on challenges and issues on cloud computing and Lecture

39.

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**QUESTION 14:**

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

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: In cloud computing, the users have no knowledge about the backend physical hardware orchestration and management. Refer Lecture 37.



**QUESTION 15:**

GreenCloud implementation focuses most on which of the following aspects?

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

Correct Answer: b. Energy

Detailed Solution: Refer Lecture 40@14:48.

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