Cloud Computing

Assignment-Week 12

TYPE OF QUESTION: MCQ/MSQ

Number of questions: **10** **Total mark: 10 X 1 = 10**

QUESTION 1:

According to the given definition, which of the following statement(s) is (are) true about dew computing?

a. Dew computing is a cloud computing paradigm where all computing is done on the cloud without any reliance on on-premises computers.
b. Dew computing is a paradigm where on-premises computers provide functionality that is dependent on cloud services.
c. Dew computing is a paradigm where on-premises computers and cloud services are completely isolated from each other and do not collaborate in any way.
d. Dew computing is a paradigm where on-premises computers provide functionality that is independent of cloud services and is also collaborative with cloud services.

Answer: d

Detailed Solution: According to the definition given, dew computing is a paradigm where on-premises computers provide functionality that is independent of cloud services and is also collaborative with cloud services.

QUESTION 2:

What are the different aspects of CPS?

a. Cyber, physical, and communication only
b. Cyber, dynamics, and safety only
c. Cyber, physical, computation, dynamics, communication, security, and safety
d. Cyber, physical, and computation only

Answer: c

Detailed Solution: Refer slide 6 of Module 12: Cloud Computing Paradigms; Lecture 57.

QUESTION 3:

What is the benefit of 5G's ability to scale down in data rates, power, and mobility for IoT devices?

a. It allows for faster data rates and lower latency
b. It provides extremely lean and low-cost connectivity solutions
c. It enables immersive experiences like VR and AR
d. It provides ultra-reliable, low-latency links for mission-critical communications.

Answer: c

Detailed Solution: 5G is meant to seamlessly connect a massive number of embedded sensors in virtually everything through the ability to scale down in data rates, power, and mobility—providing extremely lean and low‑cost connectivity solutions

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QUESTION 4:

Fog-Edge computing leads to increased network congestion

a. True
b. False

Correct Answer: b

Detailed Solution: Fog-Edge computing leads to less network congestion

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QUESTION 5:

What is(are) the key feature(s) of Mobile Cloud computing for 5G networks?

a. Sharing resources for mobile applications
b. Improved reliability due to data storage in the cloud
c. Increased resource consumption by mobile applications
d. None of these

Correct Answer: a and b

Detailed Solution: Key features of MCC for 5G networks include sharing resources for mobile applications and improved reliability as data is backed up and stored in the cloud.

QUESTION 6:

Mobility Analytics utilizes the cloud platform for computation and storage.

A) True
B) False

Correct Answer: A

Detailed Solution: Mobility Analytics utilizes a Cloud platform for computation and storage.

QUESTION 7:

In which computing environment is latency fixed due to the location of application modules at the Area Gateway?

a. Fog computing
b. Cloud computing
c. Serverless Computing
d. None of the above

Correct Answer: a

Detailed Solution: In fog computing environment is latency fixed due to the location of application modules at the Area Gateway

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QUESTION 8:

Resource-constrained low-latency devices drive the need of

a. Heterogeneous and distributed computing architectures
b. Homogeneous and distributed computing architectures
c. Heterogeneous and parallel computing architectures
d. Homogeneous and parallel computing architectures

Correct Option: a

Detailed Solution: On-premises and edge data centers will continue to close the gap between resource-constrained low-latency devices and distant cloud data centers, leading to driving the need for heterogeneous and distributed computing architectures.

QUESTION 9:

Customized wearable devices for collecting health parameters are the best examples of

a. IoHT
b. Fog device
c. Fog-Cloud interfaced.
d. Cloud-Fog-Edge-IoHT

Correct Answer: d

Detailed Solution: Customized wearable devices for collecting health parameters are the best examples of Cloud-Fog-Edge-IoHT.

QUESTION 10:

The cyber-physical system involves transdisciplinary approaches, merging the theory of cybernetics, mechatronics, design, and process science.

a. True
b. False

Correct Answer: a

Detailed Solution: The cyber-physical system involves transdisciplinary approaches, merging the theory of cybernetics, mechatronics, design, and process science.