



Cloud Computing

Assignment-Week 12

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 10

Total mark: 10 X 1 = 10

QUESTION 1:

What is the purpose of 5G wireless technology?

- a. Deliver lower data speeds
- b. Deliver higher data speeds
- c. Decrease network capacity
- d. Decrease availability

Answer: b

Detailed Solution: 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users.

QUESTION 2:

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

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

Answer: a

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

QUESTION 3:

How are mobile devices connected to mobile networks in Mobile Cloud Computing?

- a. Through cloud storage servers
- b. Through remote access protocols
- c. Through base stations such as base transceiver station, access point, or satellite



- d. Through peer-to-peer connections

Answer: c

Detailed Solution: Mobile devices are connected to mobile networks via base stations (e.g., base transceiver station, access point, or satellite).

QUESTION 4:

What drives the need for heterogeneous and distributed computing architectures?

- a. Resource-constrained low-latency devices
- b. Distant cloud data centres
- c. High-speed internet connections
- d. Availability of low-cost computing devices

Answer: 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 5:

What are the different aspects of CPS?

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

Answer: d

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

QUESTION 6:

What role will service orchestration play in the future of industrial applications?

- a. It will limit the interaction of industrial applications with network resources



- b. It will not influence traffic routing for industrial applications.
- c. It will enable industrial applications to interact with the network resources in advanced ways.
- d. It will not select the location and quality of service for industrial applications.

Answer: c

Detailed Solution: Service orchestration will play a key role moving forward, enabling industrial applications to interact with the network resources in advanced ways such as selecting location, quality of service, or influencing the traffic routing to deliver on application demands

QUESTION 7:

What is the purpose of spatial analysis?

- a. To study the characteristics of people and their behaviors
- b. To study the characteristics of places and regions and their relationships
- c. To analyze financial data and make investment decisions
- d. To create maps of the physical world

Answer: b

Detailed Solution: Spatial analysis is an attempt to solve location-oriented problems and a better understanding of where and what is occurring in the surrounding world/ region. – Beyond mapping - study the characteristics of places/ regions and the relationships between them.

QUESTION 8:

How is the signal obtained from the accelerometer data for activity detection?

- a. By calculating the square root of the x-axis, y-axis, and z-axis signals
- b. By averaging the x-axis, y-axis, and z-axis signals
- c. By subtracting the x-axis, y-axis, and z-axis signals
- d. By multiplying the x-axis, y-axis, and z-axis signals

Answer: a

Detailed Solution: The collected data has three components: x-axis, y-axis, z-axis.

$$A = \sqrt{x^2 + y^2 + z^2}$$



QUESTION 9:

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 10:

According to the given objectives, which of the following statement(s) is (are) true about the proposed health model?

- a. The health model is designed for cloud computing and does not make use of fog or edge computing.
- b. The health model is designed for edge computing only and does not make use of cloud or fog computing.
- c. The health model is designed for fog-edge computing and aims to reduce latency, network usage and cost incurred in the cloud.
- d. The health model is designed for dew computing and does not make use of cloud, fog, or edge computing.

Answer: c

Detailed Solution: According to the given objectives, the health model is designed for fog-edge computing and aims to reduce latency, network usage and cost incurred in the cloud.
