



## Cloud Computing

### Assignment-Week 7

#### TYPE OF QUESTION: MCQ/MSQ

Number of questions: 10

Total mark: 10 X 1 = 10

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#### **QUESTION 1:**

Fog Computing is applicable in

- a) Smart Grid
- b) Smart Traffic Light
- c) Connected Vehicles
- d) None of the above

**Correct Answer: a, b, c**

**Detailed Solution:** Fog computing is implemented in Smart Grid, Smart Traffic light, Connected Vehicles. So, the correct options are (a), (b), and (c).

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#### **QUESTION 2:**

Fog Computing has \_\_\_\_\_ probability to attack on data enrouter and required \_\_\_\_\_ number of server nodes than Cloud Computing.

- a) lower , less
- b) lower, large
- c) higher, less
- d) higher, large

**Correct Answer: b**

**Detailed Solution:** Fog Computing has a lower probability to attack on data enrouter and required a large number of server nodes than Cloud Computing. Refer to Lecture 34.

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#### **QUESTION 3:**

Consider the following statements:

Statement 1: In Geospatial Cloud, it is needed to integrate data from heterogeneous back-end data service.

Statement 2: Data services can be inside and/or outside of the cloud environment in Geospatial Cloud.



- a. Statement 1 is Correct, but Statement 2 is Incorrect.
- b. Statement 2 is Correct, but Statement 1 is Incorrect.
- c. Both statements are Correct.
- d. Both statements are Incorrect

**Correct Answer: c**

**Detailed Solution:** Both statements are correct regarding Geospatial Cloud concept. So, the correct option is (c). Refer to Lecture 35.

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#### **QUESTION 4:**

Which of the following is/are the challenge(s) of the Geospatial Cloud?

- a) Scaling of Spatial Databases
- b) Policy management among the tenants
- c) Implementation of Spatial Databases
- d) None of the above

**Correct Answer: a, b, c**

**Detailed Solution:** Challenges of Geospatial Cloud are as follows-

1. Implementation of Spatial Databases
2. Scaling of Spatial Databases
3. Policy management among the tenants

So, the correct options are (a), (b), (c).

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#### **QUESTION 5:**

Which of the following is/are feature(s) of Mobile Cloud Computing?

- a) Uses less mobile device resources because applications are cloud-supported
- b) Reduces reliability with information backed up and stored in the cloud
- c) Mobile devices connect to services delivered through an API architecture
- d) Facilitates slower development, delivery and management of mobile apps



**Correct Answer: a, c**

**Detailed Solution:** Mobile cloud computing features are: Facilitates the quick development, delivery and management of mobile apps. Uses fewer device resources because applications are cloud-supported. Mobile devices connect to services delivered through an API architecture. Improves reliability with information backed up and stored in the cloud. So, the correct options are (a) and (c).

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**QUESTION 6:**

Which of the following statement(s) is/are FALSE about Fog Computing?

- a) Fog nodes present near to the end-user
- b) Fog computing enables real-time applications
- c) Fog nodes' response time is much higher than Cloud's
- d) Network routers, WiFi Gateways will not be capable of running applications

**Correct Answer: c, d**

**Detailed Solution:** Fog nodes present near to the end-user, Fog computing use for real-time applications, Fog nodes' response time is much lower than cloud server, network routers, WiFi Gateways will be capable of running applications. So, the correct options are (c), (d).

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**QUESTION 7:**

Choose the most appropriate option regarding CLOUDLET code offloading.

Statement 1: The architecture reduces latency by using a multi-hop network.

Statement 2: It potentially lowers battery consumption by using Wi-Fi or short range radio.

- a. Statement 1 is correct but Statement 2 is incorrect
- b. Statement 2 is correct but Statement 1 is incorrect
- c. Both the statements are correct
- d. Both the statements are incorrect.

**Correct Answer: b**

**Detailed Solution:** The architecture reduces latency by using a single-hop network and potentially lowers battery consumption by using Wi-Fi or short range radio. So, the correct option is (b).  
Refer Lecture 32.

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**QUESTION 8:**

Benefits of Fog Computing is/are:

- a. Immobility
- b. Low latency and location-aware.
- c. Homogeneity
- d. Widespread geographical distribution.

**Correct Answer: b, d**

**Detailed Solution:** Benefits of Fog Computing are (i) Very large number of nodes are involved, (ii) Low latency and location-aware, (iii) Heterogeneity and (iv) Widespread geographical distribution. So, correct option is (b) and (d).

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**QUESTION 9:**

Distance between the client and server in Cloud Computing is of \_\_\_\_\_ and Fog computing is \_\_\_\_\_.

- a) One Hop, Multiple Hop
- b) One Hop, One Hop
- c) Multiple Hop, One Hop
- d) Multiple Hop , Multiple Hop

**Correct Answer: c**

**Detailed Solution:** Distance between the client and server in Cloud Computing is of multiple hop and Fog computing is one hop. Refer Lecture 34.

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**QUESTION 10:**

Match the following tables related to Mobile Cloud Computing key components:

Table – I    Table – II

Table – I	Table – II
1. Profiler 2. Solver 3. Synchronizer	i. Collects results of split execution and combine, and make the execution details transparent to the user



	<ul style="list-style-type: none"><li>ii. Monitors application execution to collect data about execution time, power consumption, network traffic</li><li>iii. The task of selecting which parts of an app runs on mobile and cloud</li></ul>
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- a. 1. -> (ii), 2. -> (iii), 3. -> (i)
- b. 1. -> (iii), 2. -> (i), 3. -> (ii)
- c. 1. -> (i), 2. -> (ii), 3. -> (iii)
- d. 1. -> (ii), 2. -> (i), 3. -> (iii)

Correct Answer: a

Detailed Solution:

Profiler monitors application execution to collect data about the time to execute, power consumption, network traffic. Solver has the task of selecting which parts of an app runs on mobile and cloud. Task of synchronizer modules is to collect results of split execution and combine, and make the execution details transparent to the user. So, the correct option is (a).

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