Cloud Computing

Assignment-Week 9

TYPE OF QUESTION: MCQ/MSQ

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

QUESTION 1:

Fog computing is a model in which data, processing and applications are concentrated in devices at the _____ rather than existing almost entirely in the cloud.

a. fog
b. local node
c. network station
d. network edge

Correct Answer: d

Detailed Solution: Fog computing is a model in which data, processing and applications are concentrated in devices at the network edge rather than existing almost entirely in the cloud. So the option is (d).

QUESTION 2:

In the Cloud-Fog-Edge Computing paradigm, sensors being end devices, can perform basic data processing

a. True
b. False

Correct Answer: a

Detailed Solution: In the Cloud-Fog-Edge Computing paradigm, sensors being end devices, are able to perform basic data processing.

QUESTION 3:

What is(are) the benefit(s) of Fog computing?

a. Provides less data location-awareness
b. Increases network congestion
c. Causes lesser latency permits usage in real-time applications
d. None of these

Correct Answer: c

Detailed Solution: Fog always decreases latency permits in real-time applications.

QUESTION 4:

The _____ used for resource management in fog/edge computing are classified on the basis of data flow, control and tenancy.

a. Algorithms
b. Architectures
c. Hardware
d. Infrastructure

Correct Answer: b

Detailed Solution: The architectures used for resource management in fog/edge computing is classified based on data flow, control, and tenancy.

QUESTION 5:

Virtualization software is an example of _____.

a. Application software
b. Middleware
c. System software
d. Benchmarking

Correct Answer: c

Detailed Solution: Virtualization software is an example of System software.

QUESTION 6:

Fog infrastructure consists of IoT devices, Fog Nodes, and at least one Cloud Data Center never ensures scalability

a. True
b. False

Correct Answer: b

Detailed Solution: Scalability is one of the characteristics of fog computing.

QUESTION 7:

What is(are) the application placement constraint(s) for fog nodes?

a. Network constraints
b. Interoperability

c. Resource constraints
d. None of these

Correct Answer: a,c
Detailed Solution: Network constraints: such as latency, bandwidth, etc. and these constraints need to be considered when deploying applications.
Resource constraints: an infrastructure node is limited by finite capabilities in terms of CPU, RAM, storage, bandwidth, etc. While placing application(s) (service components), the resource requirements need to be considered.

QUESTION 8:

Cloud Federation should prefer maximum geographical separation.

a. True
b. False

Correct Answer: a
Detailed Solution: Cloud Federation should prefer maximum geographical separation.

QUESTION 9:

Benefit(s) of cloud federation is(are)

a. Global Utility
b. Resource utilization minimization
c. Power consumption maximization
d. All of these

Correct Answer: a
Detailed Solution: Benefits of cloud federation are: Maximize resource utilization; Minimize power consumption; Load balancing; Global utility; Expand CSP's global foot prints

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QUESTION 10:

A CSP has little or no control over remote resources in case of
a. Tightly Coupled Federation
b. Medium Coupled Federation
c. Loosely Coupled Federation
d. None of these
Correct Answer: c

Detailed Solution: In loosely coupled federation, a CSP has little or no control over remote resources (for example, decisions about VM placement are not allowed), monitoring information is limited (for example, only CPU, memory, or disk consumption of each VM is reported), and there is no support for advanced features such as cross‑site networks or VM migration.
