



**Introduction to
Internet of Things
Assignment-Week 9**

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1= 15

QUESTION 1:

Fog is the layer between which two layers?

- a. Application and Presentation
- b. Network and Transport
- c. Cloud and IoT
- d. Transport and Session

Correct Answer: c. Cloud and IoT

Detailed Solution: Fog is the layer between Cloud and IoT.

See Lecture 45 @ 07:04

QUESTION 2:

Which of the following is/are the actors in sensor-cloud?

- a. Users
- b. Sensor-owner
- c. SCSP
- d. All of the above

Correct Answer: d. All of the above



Detailed Solution: The actors in sensor-cloud include end users, sensor-owner and SCSP .
(Please refer Lecture 42@14:24)

QUESTION 3:

Which of the following are considered key limitations of Wireless Sensor Networks (WSNs)?

- a. Cost of sensor nodes
- b. Physical deployment of sensors
- c. Both a and b
- d. Neither a nor b

Correct Answer: c. Both a and b

Detailed Solution: WSNs face several limitations beyond just hardware cost, including the complexity of procurement, difficulty in physical deployment, and ongoing maintenance issues.
(Please refer : Lecture 42 @ 10:52)

QUESTION 4:

Which of the following takes the decision whether the data should be provided directly to the end user or is it required to re-cache the data from external cache?

- a. User cache
- b. Sensor cache
- c. External cache



d. Internal Cache

Correct Answer: d. Internal Cache

Detailed Solution: Internal Cache takes the decision whether the data should be provided directly to the end user or is it required to re-cache the data from external cache. (Please refer Lecture 43@22:13)

QUESTION 5:

Fill in the blanks

The _____ extends the cloud nearer the IoT devices.

- a. Sensors
- b. Fogging
- c. Neither a nor b
- d. Both a and b

Correct Answer: b. Fogging

Detailed Solution: Fogging or fog computing extends the cloud nearer the IoT devices . (Please refer Lecture 44@6:33)

QUESTION 6:

Which of the following is/are the types of data with respect to sensitivity.

- a. Time-sensitive
- b. Less time-sensitive
- c. Not time-sensitive



d. All of these

Correct Answer: d. All of these

Detailed Solution: Time-sensitive, less time-sensitive and not time-sensitive are the types of data with respect to sensitivity. (Please refer Lecture 44@20:05)

QUESTION 7:

Who coined the term Fog computing?

- a. IBM
- b. CISCO
- c. Both a and b
- d. Neither a nor b

Correct Answer: b. CISCO

Detailed Solution: CISCO coined the term Fog computing. (Please refer Lecture 44@4:18)

QUESTION 8:

What of the following is an advantage of fog computing ?

- a. Anywhere deployability
- b. Mobility
- c. Both a and b



d. Neither a nor b

Correct Answer: c. Both a and b

Detailed Solution: Fog computing supports anywhere deployability and mobility. (Please refer Lecture 45@21:21)

QUESTION 9:

State True or False

Openstack is an open-source software.

a. True

b. False

Correct Answer: a. True

Detailed Solution: Openstack is an open-source software. (Please refer Lecture 41@2:14)

QUESTION 10:

To what are the fog nodes connected to?

- a. IoT devices
- b. Cloud
- c. Neither a nor b
- d. Both a and b

Correct Answer: d. Both a and b

Detailed Solution: The fog nodes are connected to the IoT devices and Cloud. (Please refer Lecture 45@11:05)

QUESTION 11:



Which of the following reduces danger and increases output?

- a. Static analysis
- b. Static decision making
- c. Both a and b
- d. Neither a nor b

Correct Answer: d. Neither a nor b

Detailed Solution: Dynamic analysis and decision making reduces danger and increases output. (Please refer Lecture 45@25:00)

QUESTION 12:

Fill in the blanks. Fog computing is an intermediate layer between _____ and _____.

- a. Dew and devices
- b. Cloud and devices
- c. Cloud and server
- d. None of these

Correct Answer: b. Cloud and devices

Detailed Solution: Fog computing is an intermediate layer between Cloud and devices. (Please refer Lecture 44@6:40)

QUESTION 13:

Unnecessary sensing causes energy consumption.

- a. True



b. False

Correct Answer: a. True

Detailed Solution: Unnecessary sensing causes energy consumption. (Please refer Lecture 43@20:54)

QUESTION 14:

Which of the following is used by the fog applications to increase the speed of service accessibility?

- a. Low power
- b. Good network connection
- c. Accelerators
- d. Analytics

Correct Answer: c. Accelerators

Detailed Solution: Accelerators increase the speed of service accessibility. (Please refer to Page 260, Chapter 11, Introduction to IoT. S. Misra, A. Mukherjee, and A. Roy, 2020. Cambridge University Press.)

QUESTION 15:

Fill in the blank. The concept of _____ enables physical hardware to be shared among multiple entities.

- a. Hardware virtualization
- b. Software virtualization
- c. Module virtualization



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d. All of these

Correct Answer: a. Hardware virtualization

Detailed Solution: The concept of hardware virtualization enables physical hardware to be shared among multiple entities. (Please refer to Page 262, Chapter 11, Introduction to IoT. S. Misra, A. Mukherjee, and A. Roy, 2020. Cambridge University Press.)

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