



**Introduction to
Internet of Things
Assignment-Week 2**

TYPE OF QUESTION: MCQ/MSQ

Number of questions: 15

Total marks: 15 X 1 = 15

QUESTION 1:

Based on functionality, MQTT is a _____ protocol.

- a. Transport
- b. Data**
- c. Semantic
- d. None of these

Correct Answer: b. Data

Detailed Solution: MQTT is a Data Protocol.

See lecture 6 (Basics of IoT Networking – Part II) @ 01:30

QUESTION 2:

MQTT is designed for -

- a. Remote connections
- b. Limited bandwidth
- c. Both (a) and (b)**
- d. Neither (a) nor (b)

Correct Answer: c. Both (a) and (b)

Detailed Solution: MQTT is designed for –

1. Remote connections



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2. Limited bandwidth

See lecture 6 (Basics of IoT Networking – Part II) @ 03:50

QUESTION 3:

State True or False.

MQTT protocol follows _____ paradigm for exchanging messages.

1. Client-Server
2. Publish-Subscribe
3. Both (a) and (b)
4. None of these

See lecture 6 (Basics of IoT Networking – Part II) @ 02:00

QUESTION 4:

State True or False.

Statement: “In MQTT, the Subscribers are Lightweight Sensors.”

- a. True
- b. False

Correct Answer: b. False

Detailed Solution: In MQTT, the Publishers are lightweight sensors.

See lecture 6 (Basics of IoT Networking – Part II) @ 04:49



QUESTION 5:

Which of the following is MQTT component?

- a. Middleman
- b. Mules
- c. Both (a) and (b)
- d. None of these

Correct Answer: d. None of these

Detailed Solution:

Components of MQTT are –

1. Publishers
2. Subscribers
3. Beokers

See lecture 6 (Basics of IoT Networking – Part II) @ 04:50

QUESTION 6:

State True or False.

A topic in MQTT can only be numbers.

- a. False
- b. True

Correct Answer: b. False

Detailed Solution: A topic in MQTT is a string.

Book - Introduction to IoT, Authors – Sudip Misra, Anandarup Mukherjee, and Arijit Roy,
Publisher – Cambridge University Press, Edition – 1 (2021)



QUESTION 7:

State True or False.

There are only two methods specified by the MQTT protocol.

- a. False
- b. True

Correct Answer: a. False

Detailed Solution: There are 5 number of methods in MQTT protocol.

See lecture 6 (Basics of IoT Networking – Part II) @ 05:49

QUESTION 8:

The Publish/Subscribe architecture in MQTT is _____ driven.

- a. Event
- b. Pulse
- c. Sound
- d. None of these

Correct Answer: a. Event

Detailed Solution: Publish/Subscribe in MQTT is event-driven and enables messages to be pushed to clients.

See lecture 6 (Basics of IoT Networking – Part II) @ 08:32



QUESTION 9:

State True or False.

The topic is the routing information for the broker.

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: The topic is the routing information for the broker.

See lecture 6 (Basics of IoT Networking – Part II) @ 08:30

QUESTION 10:

CoAP is _____ and _____.

- a. Based on HTTP
- b. Is designed for M2M applications
- c. None of these
- d. Both (a) and (b)

Correct Answer: d. Both (a) and (b)

Detailed Solution: CoAP is based on HTTP and is designed for M2M applications.

See lecture 7 (Basics of IoT Networking – Part III) @ 00:49



QUESTION 11:

In CoAP, client-server interaction is asynchronous over a datagram transport protocol such as _____.

- a. UDP
- b. TCP
- c. IP
- d. XMP

Correct Answer: a. UDP

Detailed Solution: In CoAP, client-server interaction is asynchronous over a datagram transport protocol such as UDP.

See lecture 7 (Basics of IoT Networking – Part III) @ 00:50

QUESTION 12:

What is the full form of AMQP?

- a. Advanced Message Querying Protocol
- b. Advanced Message Quality Protocol
- c. Advanced Message Queuing Protocol
- d. None of these

Correct Answer: c. Advanced Message Queuing Protocol

Detailed Solution: Advanced Message Queuing Protocol

See lecture 7 (Basics of IoT Networking – Part IV) @ 0:55



QUESTION 13:

AMQP has _____ number of frame types.

- a. 6
- b. 3
- c. 5
- d. 9

Correct Answer: d. 9

Detailed Solution: In AMQP there are nine frame types..

See lecture 8 (Basics of IoT Networking – Part IV) @ 07:20

QUESTION 14:

State True or False.

Statement: “The OSI model has 7 layers.”

- a. True
- b. False

Correct Answer: a. True

Detailed Solution: The OSI model is a conceptual framework that divides any networked communication system into seven layers.

See Page number – 10, Chapter - 1, Book - Introduction to IoT, Authors – Sudip Misra, Anandarup Mukherjee, and Arijit Roy, Publisher – Cambridge University Press, Edition – 1 (2021)



QUESTION 15:

The “Destination Address” in the IPv4 packet represents which of the following?

- a. The source node address of the packet
- b. The intermediate hop in the network
- c. Both (a) and (b)
- d. Neither (a) nor (b)

Correct Answer: d. Neither (a) nor (b)

Detailed Solution: The “Destination Address” in the IPv4 packet represents the address of the destination node in the network.

See Page number – 18, Chapter - 1, Book - Introduction to IoT, Authors – Sudip Misra, Anandarup Mukherjee, and Arijit Roy, Publisher – Cambridge University Press, Edition – 1 (2021)

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