NPTEL Online Certification Courses

Indian Institute of Technology Kharagpur

Introduction to
Internet of Things
Assignment-Week 1

TYPE OF QUESTION: MCQ/MSQ

Number of questions: **15** **Total marks: 15 X 1= 15**

QUESTION 1:

Which of the following is/are not a thing as per IoT?

a. Fan
b. Light
c. Refrigerator
d. None of the these

Correct Answer: d. None of the these

Detailed Solution: All of these are things as per IoT

See lecture 1 (Introduction to IoT – Part - I) @ 02:15

QUESTION 2:

State true or false.

Statement: The things in IoT consist of embedded systems.

a. True
b. False

Correct Answer: a. True

Detailed Solution: The things in IoT consist of embedded systems.

See lecture 1 (Introduction to IoT – Part - I) @ 04:15

QUESTION 3:

State whether the following statement is True or False.

Statement: IoT is one of the technologies that enable smart farms.

a. True
b. False

Correct Answer: a. True

Detailed Solution: IoT is one of the technologies that enable smart farms.

See lecture 2 (Introduction to IoT – Part - II) @ 05:27

QUESTION 4:

State whether the following statement is True or False.

Statement: In M2M, it is mandatory that the interactions between the machines and devices happen through a cloud computing infrastructure.

a. True
b. False

Correct Answer: b. False

Detailed Solution: In M2M, the interactions between the machines and devices can happen through a cloud computing infrastructure.

See lecture 1 (Introduction to IoT – Part - I) @ 33:22

QUESTION 5:

Sometimes, when there is a need for the nodes to communicate directly to the Internet, _____ can be used.

a. Sensors
b. Actuators
c. Tunneling
d. None of these

Correct Answer: c. Tunneling

Detailed Solution: Sometimes, there is a need for the nodes to communicate directly to the Internet. This is achieved by tunneling.

See lecture 2 (Introduction to IoT – Part - II) @ 11:44

QUESTION 6:

State whether the following statement is true or false.

Statement: In multi-homing a node/network is connected to only two networks for improved reliability.

a. True
b. False

Correct Answer: b. False

Detailed Solution: In multi-homing, a node/network is connected to multiple networks for improved reliability.

See lecture 2 (Introduction to IoT – Part - II) @ 15:22

QUESTION 7:

Which of the following is/are not enablers of IoT?

a. Advancement in gene sequencing
b. Nanotechnology
c. Sensors
d. RFID

Correct Answer: a. Advancement in gene sequencing

Detailed Solution: The enablers of IoT are –

a. RFID
b. Nanotechnology
c. Sensors

See lecture 1 (Introduction to IoT – Part - I) @ 12:41

QUESTION 8:

State whether the following statement is True or False.

Statement: The decreasing number of devices in IoT is expected to result in an address crunch.

a. True
b. False

Correct Answer: b. False

Detailed Solution: The increasing number of devices in IoT is expected to result in an address crunch.

See lecture 2 (Introduction to IoT – Part - II) @ 01:19

QUESTION 9:

Why IoT has become so popular?

a. It can provide advanced level of services to the society
b. It can help reduce human effort
c. It can potentially make processes more efficient
d. All of these

Correct Answer: d. All of these

Detailed Solution: IoT has become popular as –

- It can provide advanced level of services to the society
- It can help reduce human effort
- It can potentially make processes more efficient

See lecture 1 (Introduction to IoT – Part - I) @ 03:15

QUESTION 10:

State whether the following statement is true or false.

The resolution of a sensor is the maximum change it can detect in the quantity that it is measuring.

a. False
b. True

Correct Answer: a. Resolution

Detailed Solution: The resolution of a sensor is the smallest change it can detect in the quantity that it is measuring.

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See lecture 3 (Sensing) @ 12:33

QUESTION 11:

Transducer is a _____ term and includes _____.

a. special, only sensors

b. special, only actuators

c. collective, both sensors and actuators

d. None of these

Correct Answer: c. collective, both sensors and actuators

Detailed Solution: Transducer is a collective term and includes both sensors and actuators.

See lecture 3 (Sensing) @ 11:49

QUESTION 12:

Which of the following is/are feature/features of sensors?

a. It is only sensitive to the measured property.
b. It acts on the surrounding environment.
c. Both (a) and (b)
d. None of these

Correct Answer: a. It is only sensitive to the measured property.

Detailed Solution: It is only sensitive to the measured property. It does not influence the measure property and does not act on the surrounding environment.

See lecture 3 (Sensing) @ 12:17

QUESTION 13:

Which of the following technologies have unified and has resulted in the evolution of IoT?

a. Low-power embedded systems
b. Cloud Computing
c. Machine Learning
d. All of these

Correct Answer: d. All of these

Detailed Solution: Unification of technologies which has resulted in the advancement of IoT are –

a. Low-power embedded systems
b. Cloud Computing
c. Big Data
d. Machine Learning
e. Networking

See lecture 1 (Introduction to IoT – Part - I) @ 5:54

QUESTION 14:

What is the full form of IoT?

a. Internet of Tasks
b. Internet of Things
c. Internet of Tracks
d. None of these

Correct Answer: b. Internet of Things

Detailed Solution: The full form of IoT is "Internet of Things"

See lecture 1 (Introduction to IoT – Part - I) @ 1:30

QUESTION 15:

A sensor node is not made up of which of the following?

a. Sensor/Sensors
b. A processing unit
c. A power unit
d. None of these

Correct Answer: d. None of these

Detailed Solution: A sensor node is made up of a combination of sensor/sensors, a processor unit, a radio unit, and a power unit.

See Page number – 101, Chapter - 5, Book - Introduction to IoT, Authors – Sudip Misra, Anandarup Mukherjee, and Arijit Roy, Publisher – Cambridge University Press, Edition – 1 (2021)

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