



Unit 3 - Week 1

Register for
Certification exam

Course outline

How to access the
portal

Week 0

Week 1

● Lecture 1:
Introduction to IoT-
Part-I

● Lecture 2:
Introduction to IoT-
Part-II

● Lecture 3: Sensing

● Lecture 4:
Actuation

● Lecture 5: Basics
of IoT Networking-
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Assignment 1

The due date for submitting this assignment has passed.

Due on 2019-02-13, 23:59 IST

Assignment submitted on 2019-02-09, 11:32 IST

1) Internet of Things (IoT) can be integrated with which of these separate domains: 1 point

- a. Cloud-based storage and computing.
- b. Cyber Physical Systems.
- c. Big-data networks.
- d. All of these.

- ☐ a
- ☐ b
- ☐ c
- ☒ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

d

2) Which of the following is true? 1 point

- a. IoT is a subset of M2M
- b. M2M is a subset of IoT
- c. IoT is a subset of CPS
- d. CPS is a subset of Web of Things (WoT)

- ☐ a
- ☒ b
- ☐ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

b

3) M2M is a term introduced by 1 point

- a. IoT service provides
- b. Fog computing service providers
- c. Telecommunication service providers
- d. None of these

- ☐ a
- ☐ b

- ☒ c
☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

4) The number of possible addresses can be achieved with IPv6 addressing

- a. 2^6
- b. 2^{26}
- c. 2^{32}
- d. 2^{128}

- ☐ a
☐ b
☐ c
☒ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

d

5) Which of the following is a major concern in IPv4 addressing?

- a. Reliable data transmission
- b. Only addressing
- c. Provide multicast addressing
- d. All of these

- ☒ a
☐ b
☐ c
☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

a

6) Which of these statements regarding sensors is TRUE?

- a. Sensors are input devices.
- b. Sensors can be analog as well as digital
- c. Sensors respond to some external stimuli.
- d. All of these.

- ☐ a
☐ b
☐ c
☒ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

d

1 point



1 point

1 point

7) A Transducers

1 point

- a. reduce the flow of current in a circuit
- b. convert energy of one kind into another
- c. increase the speed of a motor
- d. convert a sensor to actuator

- ☐ a
- ☒ b
- ☐ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

b

8) Potentiometer is which of the following types of sensor?

1 point

- a. Speed sensor
- b. Light sensor
- c. Position sensor
- d. Force Sensor

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

9)

1 point

Based on the data type, sensor can be classified in which of the two categories?

- a. Analog and Digital
- b. Isomorphic and Homomorphic
- c. Scaler and Vector
- d. Solid and Liquide

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

10) An actuator is a component of a machine or system, which

1 point

- a. senses and transmits the data
- b. moves or controls the mechanism or the system.
- c. only receives the data from other system
- d. None of these

- ☐ a
- ☒ b



- ☐ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

b

11) A pneumatic actuator converts

- a. Force in to pressure
- b. Pressure in to acceleration
- c. Pressure in to force
- d. Force in to acceleration

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

12) A mechanical actuator converts

- a. rotary motion in to electrical power
- b. electrical power in to rotary motion
- c. rotary motion in to linear motion
- d. Linear motion in to rotary motion

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

13) Shape memory polymer (SMP) actuators function similar to

- a. human bone
- b. human muscles
- c. human blood
- d. None of these

- ☐ a
- ☒ b
- ☐ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

b

1 point



1 point

1 point

14. Rack and pinion is an example of

1 point

- a. Electrical actuator
- b. Hydraulic actuator
- c. Mechanical actuator
- d. None of these

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c

15. Which of the following actuator is used to handle fragile object?

1 point

- a. Tiny actuator
- b. Light actuator
- c. Soft actuator
- d. Hydraulic actuator

- ☐ a
- ☐ b
- ☒ c
- ☐ d

Yes, the answer is correct.

Score: 1

Accepted Answers:

c



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