



# Unit 13 - Week 11

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Certification exam

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## Assignment 11

The due date for submitting this assignment has passed.

Due on 2019-04-17, 23:59 IST

Assignment submitted on 2019-04-15, 21:53 IST

1) Self-healing in smart grid can be done using –

1 point

- ☐ a. Dampening unwanted power oscillations
- ☐ b. Avoiding unwanted flows of current through the grid
- ☐ c. Rerouting power flows in order to avoid overloading in a transmission line
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

2) Renewable energy is generated from –

1 point

- ☒ a. Natural resources
- ☐ b. Artificial resources
- ☐ c. Nuclear resources
- ☐ d. All of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. Natural resources

3) The V2X paradigm follows:

1 point

- ☒ a. A distributed architecture
- ☐ b. A centralized architecture
- ☐ c. Both a and b
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. A distributed architecture

4) What is the key technology to enable V2V and V2R communication?

1 point

- ☐ a. RFID Communication
- ☒ b. Dedicated Short Range Communication
- ☐ c. Long Range Communication
- ☐ d. Medium Range Communication

Yes, the answer is correct.

Score: 1

Accepted Answers:

b. Dedicated Short Range Communication

5) What are the risks associated with IIoT?

1 point

- ☒ a. Lack of vision and leadership

- ☐ b. Cheap sensors
- ☐ c. Confident workforce
- ☐ d. Both cheap sensors and confident workforce

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. Lack of vision and leadership

6) RSUs are connected to the Internet by:

- ☐ a. Relays
- ☐ b. Routers
- ☒ c. Gateways
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

c. Gateways

7) IIoT is mainly focused on

- ☐ a. Convenience of individuals
- ☒ b. Efficiency, safety and security of operation and individuals.
- ☐ c. Efficiency of the system.
- ☐ d. Data security.

Yes, the answer is correct.

Score: 1

Accepted Answers:

b. Efficiency, safety and security of operation and individuals.

8) Smart grid enables –

- ☒ a. Distributed energy management
- ☐ b. Centralized energy management
- ☐ c. Both distributed and centralized energy management
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. Distributed energy management

9) Traditional electric grids are associated with:

- ☐ a. Energy generation is done in centralized power plants
- ☐ b. Energy distribution is one directional – from the power plant to the homes or industries.
- ☐ c. Uni-directional communication
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

10) The smart grid is also termed as:

- ☐ a. Electricity with a brain
- ☐ b. The energy internet
- ☐ c. The electronet
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

11) Which of the following is not a property associated with power quality of smart grids:

- ☐ a. Self-Healing
- ☐ b. Frequency Monitoring and Control

1 point



1 point

1 point

1 point

1 point

1 point

- ☐ c. Load Forecasting
- ☒ d. Asset Management

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. Asset Management

12) Home power generation is a term associated with:

1 point

- ☐ a. Power generation system at consumers-end
- ☐ b. Rooftop solar electric systems
- ☐ c. Small wind turbines
- ☒ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

d. All of these

13) In smart grids, PMU stands for:

1 point

- ☐ a. Phase measurement unit
- ☒ b. Phasor measurement unit
- ☐ c. Phase monitoring unit
- ☐ d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

b. Phasor measurement unit

14) The typical data rate associated with EnOcean is?

1 point

- ☒ a. 9600 bps
- ☐ b. 3200 bps
- ☐ c. 19200 bps
- ☐ d. 1152300 bps

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. 9600 bps

15) MDMS in the context of smart grids stands for:

1 point

- ☒ a. Meter data management unit
- ☐ b. Metric data measurement unit
- ☐ c. Metric data monitoring unit
- ☐ d. None of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

a. Meter data management unit

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