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## Week 11: Assignment 11

The due date for submitting this assignment has passed.

Due on 2025-10-08, 23:59 IST.

Assignment submitted on 2025-10-06, 18:42 IST

1) What are some of the other names of the smart grids? 1 point

- a. Energy internet
- b. Electricity with a hand
- c. Electrolyte
- d. All of these

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

2) Which of the following is not done in traditional electrical grids? 1 point

- a. Manual energy monitoring
- b. Unidirectional energy distribution
- c. Unidirectional communication
- d. Distributed power plants

○ a.

○ b.

○ c.

● d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

3) Which of the following is a benefit associated with smart grids for customers? 1 point

- a. Reduced transmission of electricity
- b. Higher electricity rates
- c. Less security
- d. Different pricing options

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

4) Fill in the blank. 1 point

\_\_\_\_\_ samples voltage and current with a fixed sample rate at the installed location.

- a. PEVs
- b. DAUs
- c. PMUs
- d. None of these

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.

5) Which of the following statements are true about MDMSS? 1 point

Statement I: Decide the price per unit energy to be paid by the customers

Statement II: Handled by the energy service providers

Statement III: Aggregate the energy consumption or energy request of certain geographical area

- a. Statements I and II
- b. Statements I and III
- c. Statements II and III
- d. Statements I, II and III

○ a.

○ b.

○ c.

○ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

a.

6) Which of the following aggregate the energy consumption or energy request of a certain geographical area? 1 point

- a. DAUs
- b. Meter Data Management System
- c. Buffer
- d. None of these

○ a.

○ b.

○ c.

○ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

a.

7) Which of the following statements are true about Dynamic System Attacks? 1 point

Statement I: Replay attacks compromises sensors and monitors their outputs.

Statement II: D-DIA can lead to a system collapse.

Statement III: Covert attack is a closed loop version of replay attacks.

- a. Statements I and II
- b. Statements I and III
- c. Statements II and III
- d. Statement I, II and III

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

8) Fill in the blank. 1 point

\_\_\_\_\_ is performed by compromising the availability of the grid component.

- a. Gateway
- b. Data injection attacks
- c. AMH
- d. Denial of service

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

9) Fill in the blank. 1 point

\_\_\_\_\_ is a primary challenge in IIoT.

- a. Worker health and safety
- b. Optimised operations
- c. Regulatory compliance
- d. Integrate existing infrastructure into new IIoT infrastructure

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

10) Fill in the blank. \_\_\_\_\_ is based on a wrap and re-use approach. 1 point

a. AoT

b. PoT

c. ToII

d. IIoT

○ a.

○ b.

○ c.

○ d.

No, the answer is incorrect.

Score: 0

Accepted Answers:

d.

11) Mechanized production is a part of the 4th Industrial Revolution. 1 point

- a. True
- b. False

○ a.

○ b.

Yes, the answer is correct.

Score: 1

Accepted Answers:

b.

12) Which of the following happened in the 3rd Revolution? 1 point

- a. Mass production
- b. IIoT
- c. Mechanized production
- d. None of these

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

13) Which of the following is not a vulnerability of Smart Grid? 1 point

- a. Integrity
- b. Physical threats
- c. Dynamic system attacks
- d. None of these

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

d.

14) Big data is characterized by 7 Vs. 1 point

- a. True
- b. False

○ a.

○ b.

Yes, the answer is correct.

Score: 1

Accepted Answers:

a.

15) What is the Flow of data? 1 point

- a. Acquisition>Generation>Storage>Analysis
- b. Generation>Storage>Analysis>Acquisition
- c. Generation>Acquisition>Storage>Analysis
- d. None of these

○ a.

○ b.

○ c.

○ d.

Yes, the answer is correct.

Score: 1

Accepted Answers:

c.