What are the challenges for operational control (OT)?

What are the differences between an IT infrastructure and an operational control infrastructure with respect to connectivity, network posture, security solutions, and the response to attacks?

Which are the domains being merged in the view of Internet of Things? And what are the specifics and challenges of these domains?

Explain the manageability challenges with an IoT home environment!

Give an example on the relation between privacy and security in an IoT scenario!

What is special with security of the Internet of Things? What are the priorities for applications in IoT, seen from a security perspective?

Explain possible security problems with home IoT appliances!

When performing a risk analysis for IoT, what should you consider?

Comparing IT and automation equipment, what would you see as main difference?

Converged IoT infrastructure challenges

Explain attacks, where IoT devices can play a role!

Why can tamper resistance be important in the IoT?

Is over-the-air update a plus or a minus for the security of the system?

What are the main issues in Smart Grids?

What do you see as main security problems for an automated meter reader?

Why is QoS is an important question in automation?

What is the relation of safety and security?

What is an operating envelope? Provide examples of parameters of an operating envelope.

Why is it important to follow up requirements and have some kind of tracking?

How are QoS parameters from communication networks mapped in typical automation parameters?

Identify security risks in automation networks.

Provide at least 4 functional components of a system of system

Provide at least 4 security or privacy components

Provide the reasoning for IAC in automation

Explain components of the Smart Grid (AMS) System of Systems

Explain the difference between functional, non-functional and security components

What is the difference between the Web and the Semantic Web

Provide an example of attribute based access control

Discuss the shortcomings of the traditional threat-based approach

What is meant by Defense-In-Depth?

Which components does an industrial control system have?

What are the core elements of the Multi-Metrics approach?

Provide s,p-functionalities for an application in the (home/ car / health care/ …) domain

What is an Intrusion Detection System?

Which components has an Intrusion Detection System?

Describe how to evaluate possible attacks on an automation system.

Describe the differences between a signature-based and an anomaly detection-based IDS.

Who are the actors of a smart grid infrastructure, and what are their responsibilities?

Provide examples of future services on a smart grid infrastructure.

Explain the challenges with current proprietary solutions for Smart Meters.

Explain some key properties of cloud computing (think about efficiency, tenancy, deployment)!

What is a shadow device? How this can be useful in a cloud scenario?