



# **SNS COLLEGE OF TECHNOLOGY**

**Coimbatore-35**  
**An Autonomous Institution**



Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A++’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## **DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

### **19EET304/ IOT FOR ELECTRICAL SCIENCES**

III YEAR VI SEM

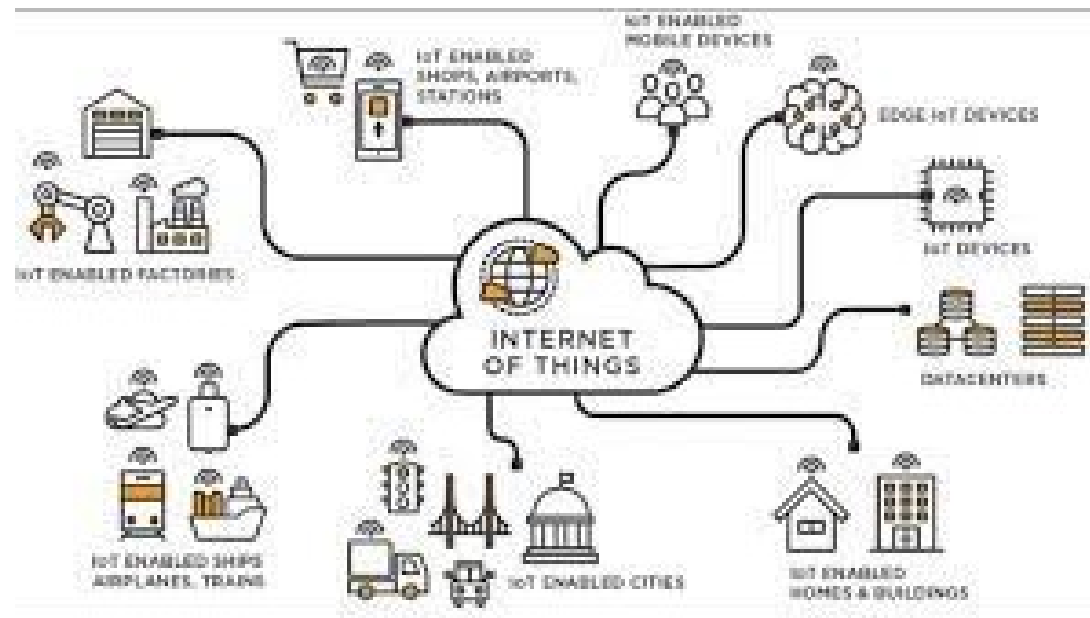
#### **UNIT 5 – IOT IMPLEMENTATIONS**

##### **TOPIC 1 – Smart Grid & IoT**



## Consider an example,

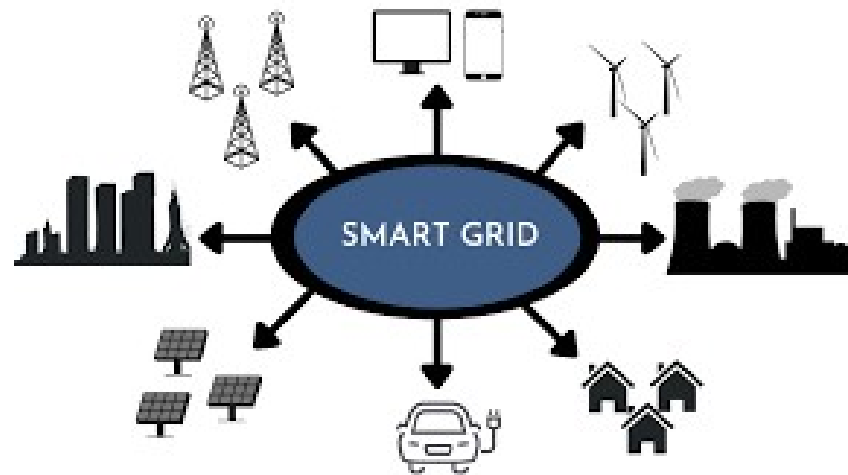
Explain the process





## What is a smart grid in Internet of Things?

Smart grids are electrical grids that involve the same transmission lines, transformers, and substations as a traditional power grid. What sets them apart is that Smart Grids involve IoT devices that can communicate with each other and with the consumers.





# Smart Grid in Action





## ASSESSMENT - 1

How its working



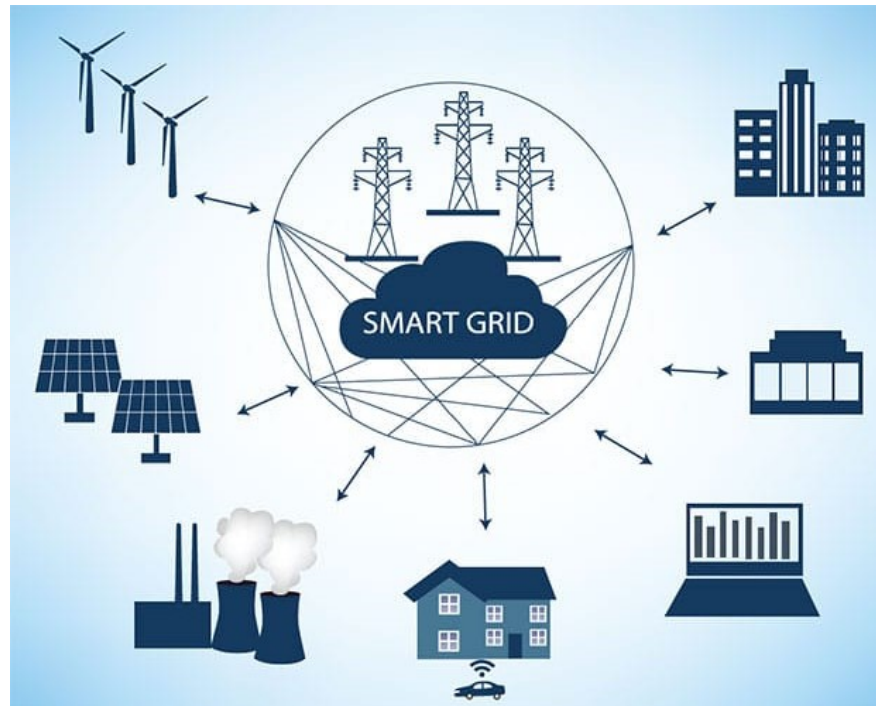


# Smart Cities Are Adopting Smart Grid Technology





## How Smart Cities Are Adopting Smart Grid Technology





## Applications



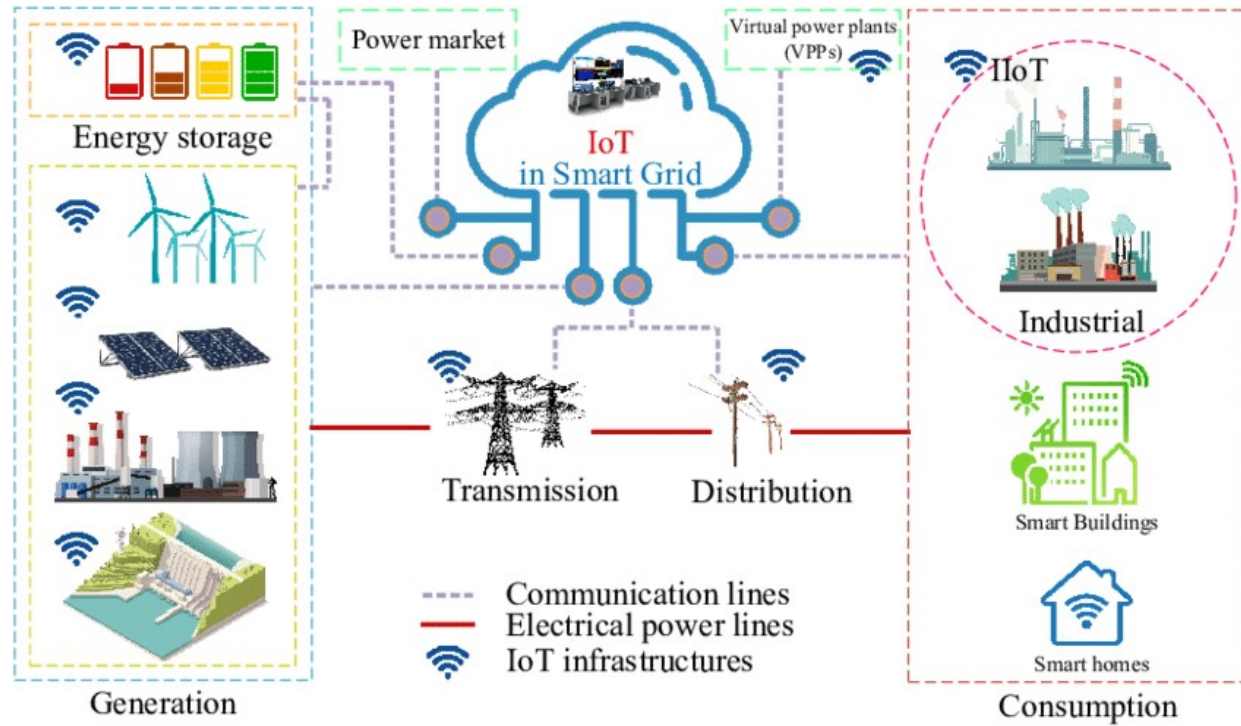
- Street lighting
- Transmission lines
- Substations
- Cogeneration
- Outage sensors
- Early detection (e.g., power disturbances due to earthquakes and extreme weather)





# ASSESSMENT - 2

## Find the Process





## References

- <https://www.digi.com/blog/post/what-is-the-smart-grid-and-how-enabled-by-iot>
- <https://www.iiot-world.com/industrial-iot/connected-industry/the-role-of-iiot-in-smart-grid-technology-and-applications/#:~:text=Smart%20grids%20are%20electrical%20grids,other%20and%20with%20the%20consumers.>
- <https://www.telit.com/blog/iiot-smart-grid-benefits/>



*Thank You*