



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

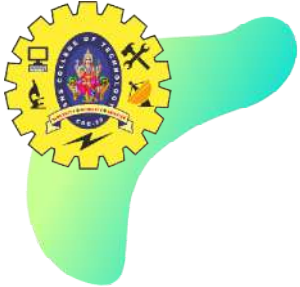
19EET304/ IOT for Electrical Sciences

III YEAR VI SEM

UNIT 3 COMMUNICATION INTERFACE

TOPIC 2 – PLC, ZIGBEE, GSM, LOCAL AREA NETWORK (LAN)





PROGRAMMABLE LOGICAL CONTROLLERS

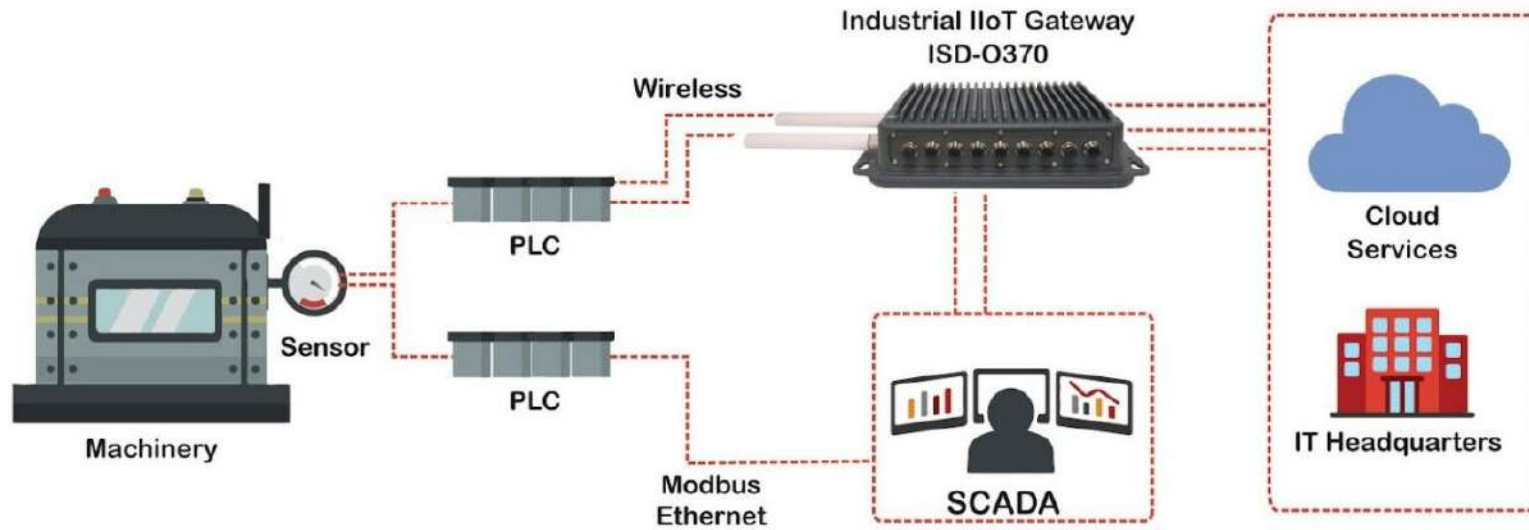
Programmable Logical Controllers (PLCs) are present in almost all modern industries. Although they come in many shapes and forms, they have one goal: to control, measure, and carry out tasks in real-time within complex industrial applications.

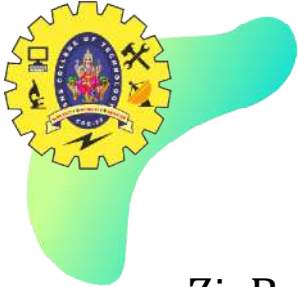




INTEGRATING PLC WITH IIOT WITH INDUSTRIAL IOT GATEWAY

Integration of PLC with Industrial IoT

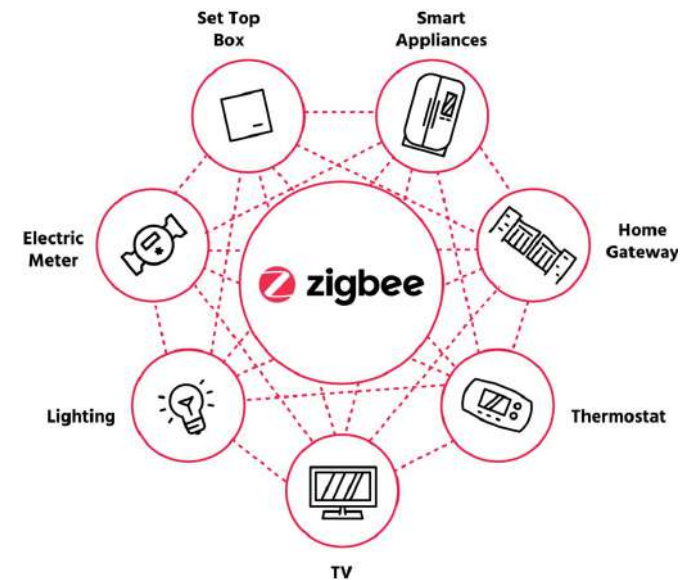


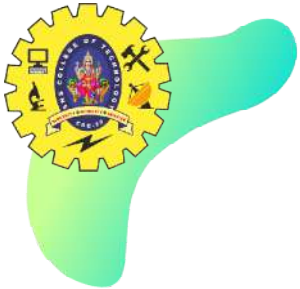


WHAT IS ZIGBEE?



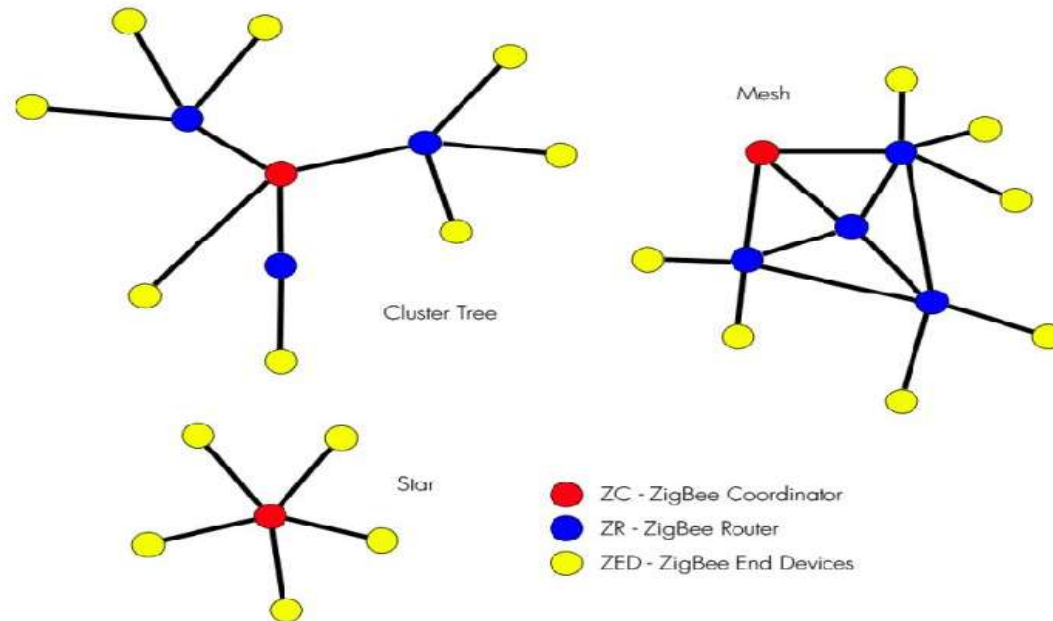
ZigBee is a wireless technology standard that provides a set of communication protocols for **short-range communications**. It is an open-source global standard developed by Zigbee Alliance to address the needs of **low-cost, low power** wireless IoT networks. The protocol is used in **low data rate**, short to medium range wireless networking devices like **senors and control** networks.

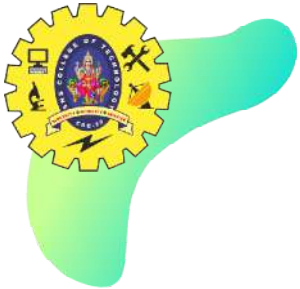




ZIGBEE TOPOLOGIES

ZigBee Topologies

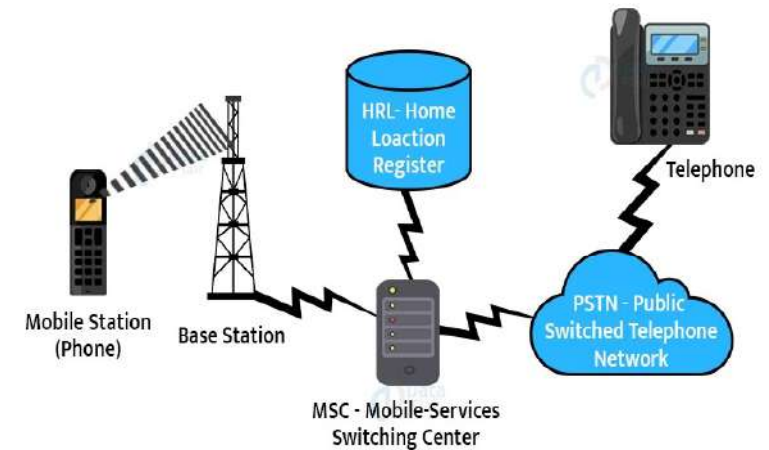


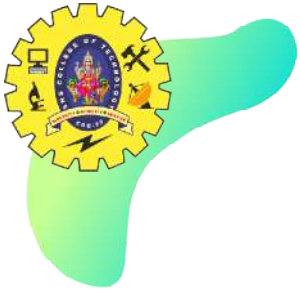


WHAT IS GSM FOR IOT?

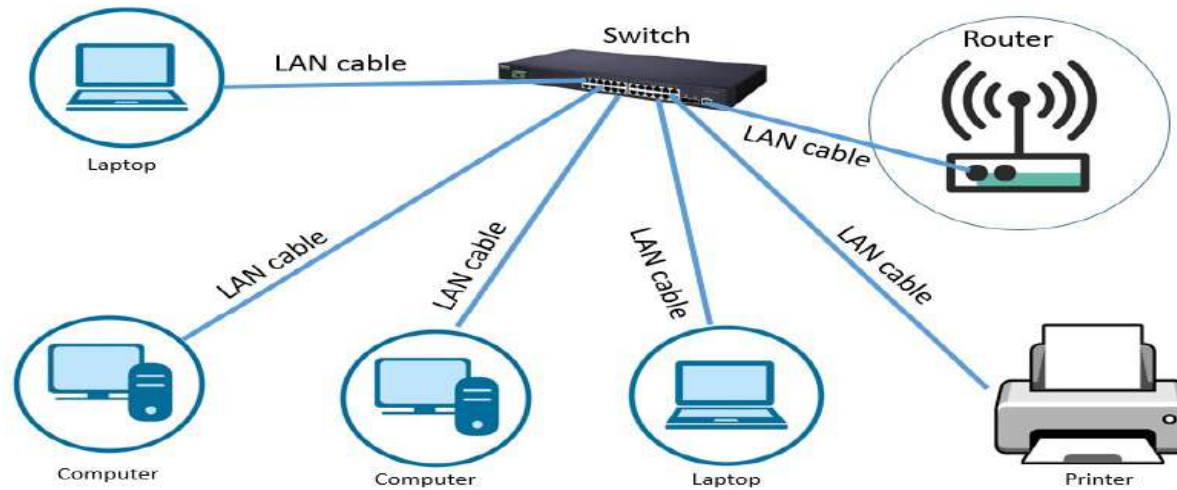


GSM is currently the most widely used network technology in Internet of Things (IoT) applications for its simplicity, low complexity cellular communications for IoT devices in a way that conserves energy





LOCAL AREA NETWORK



Local Area Network





References



- [https://www.lanner-america.com/blog/iot-gateway-integration-of-plc-with-iot/](https://www.lanner-america.com/blog/iot-gateway-integration-of-plc-with-<u>iot/</u>)
- [https://iot4beginners.com/zigbee-and-its-importance-in-the-internet-of-things/](https://iot4beginners.com/zigbee-and-its-importance-in-the-internet-of-<u>things/</u>)
- <https://www.spiceworks.com/tech/networking/articles/what-is-gsm/>

