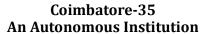


SNS COLLEGE OF TECHNOLOGY







Department of Information Technology

19ITT30 - INTERNET OF THINGS

III B.Tech. IT/ V SEMESTER

UNIT II: FUNDAMENTAL MECHANISMS & KEY TECHNOLOGIES

Topic 9: communication protocols, embedded systems

Identification of IoT Objects and Services- Structural aspects of IoT-Environment Characteristics- Traffic Characteristics-Scalability-Interoperability-Security and privacy -Key IoT Technologies : Device Intelligence - Communication Capabilities - Mobility Support - Device Power -Sensor Technology -RFID Technology - Satellite Technology - IoT Enabling Technologies- WSN, Cloud Computing, Bigdata Analytics, communication protocols, embedded systems



IoT Enabling Technologies

IoT(internet of things) enabling technologies are

- 1.Wireless Sensor Network
- 2.Cloud Computing
- 3.Big Data Analytics
- 4. Communications Protocols
- 5.Embedded System



Communications Protocols

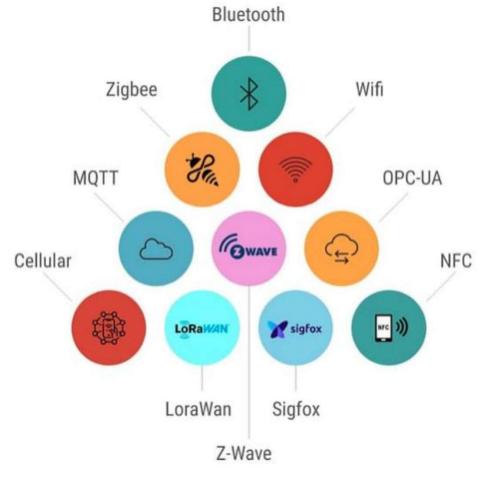
They are the backbone of IoT systems and enable network connectivity and linking to applications.

Communication protocols allow devices to exchange data over the network. Multiple protocols often describe different aspects of a single communication.

A group of protocols designed to work together is known as a protocol suite; when implemented in software they are a protocol stack.

- They are used in
- 1. Data encoding
- 2. Addressing schemes







Embedded Systems

- It is a combination of hardware and software used to perform special tasks.
- It includes microcontroller and microprocessor memory, networking units (Ethernet Wi-Fi adapters), input output units (display keyword etc.) and storage devices (flash memory).
- It collects the data and sends it to the internet.

Embedded systems used in

Examples -

- 1.Digital camera
- 2.DVD player, music player
- 3.Industrial robots
- 4. Wireless Routers etc



Thank You!