Internet of thing (IOT):

- Internet of Things is a system of interrelated devices such as mechanical, digital, machines, objects, animals or people.
- The Thing can be a person, object, machine, animal with unique identification and the ability to transfer data over a network.

Ex:- A person with a heart monitor implant
A farm animal with biochip transponder
An automobile that has inbuilt sensor to alert the driver

- An IOT ecosystem consists of Embedded systems such as processors, sensors, hardware components to collect and send data from their environment.
- The devices do most of the work without human intervention, althogh people can interact with the devices to access the data.
- IOT devices share the sensor collected data to an IOT gateway or to any other device to analyze.

Advantages of using IOT :

- Ability to access the data from anywhere at any time on any device.
- Improved communication between connected electronic devices.
- Transfering data packets over a connected network which saves time and money.
- Reduces the need for human intervention.
- Automotive tasks helps in improving the quality of a business service.

Relation between IOT and Embedded System:

- Networked Embedded Systems connected to cloud through Internet is IOT.
- Most of the things in IOT is an Embedded system.
- An Embedded system with connectivity to a local network or internet will be defined as IOT.
- IOT is a integration of different things such as Sensors, networks, cloud, apps which are Embedded systems.
- The work of things in IOT is to sense multiple parameters and to send the collected data to cloud or to actuate something.
- Hence the things in IOT is designed and developed by a Embedded systen developer.
- IOT is an embedded application which is used to control or monitor device anywhere.
- Not all Embedded Systems are things in IOT, but all IOT systems must have an Embedded system.