



# VIT

Vellore Institute of Technology

**School of Computer Science and Engineering**  
**Fall Semester - 2019**  
**CAT I**

**Course : B.Tech(CSE)**

**Slot : F1+TF1**

**Subject : Internet of Things**

**Subject Code : CSE3009**

**Duration : 90 Minutes**

**Max. Mark : 50**

**Answer All(5x10 = 50)**

1. The Internet of Things (IoT) refers to the ever-growing network of physical objects that feature an IP address for internet connectivity, and the communication that occurs between these objects and other Internet-enabled devices and systems. Elucidate how each of the blocks have their own characteristics in order to form a useful IoT system.
2. Home automation is building automation for a home, called a smart home or smart house. A Smart Home is one that's controlled by a group of connected devices. Design an architecture (depict through a diagram) to show how these devices work together to control things in smart home.
3. What is the role of ZigBee in IoT based application. Inscribe how the ZigBee IEEE standard used for two-way communication in an IoT system. List out pros and cons of ZigBee technology.
4. Web transfer protocol for use with constrained nodes and constrained networks in the Internet of Things. The protocol is designed for machine-to-machine (M2M) applications such as smart energy and building automation. Identify the protocol and inscribe its architecture with example.
5. RFID is used effectively in IoT system today also. To have an effective utilization discuss on the components and functions of RFID. Compare and contrast its types.