

# 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

### 16EET304/ IOT for Electrical Sciences

III YEAR VI SEM

### **UNIT 1 - INTRODUCTION**

TOPIC 5 - Smart transportation, smart cities, smart living, smart energy



#### HOW IS IOT USED IN SMART TRANSPORTATION?



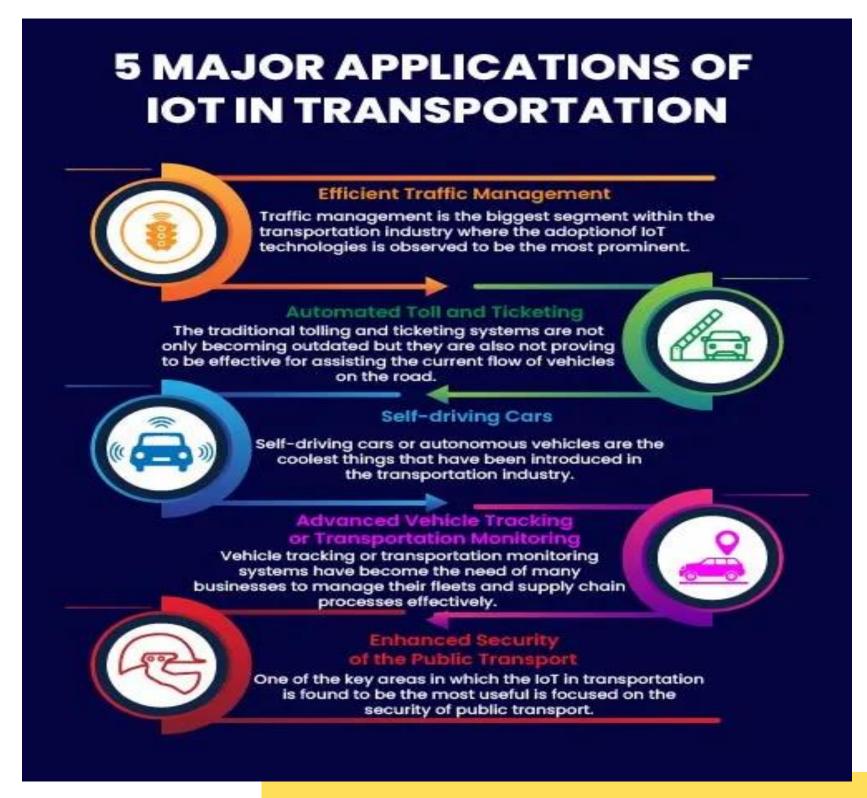
- •IoT in transportation incorporates a wide network of embedded sensors, actuators, smart objects and other intelligent devices.
- •This network collects data about the real-world scenario and transmits it over the specialized software to transform that data into useful information.





# 5 Major Applications of IoT in Transportation









### **Applications of IoT in Transportation**

- •The applications of IoT in transportation are growing rapidly and the benefits of utilizing IoT for enabling smart transportation are limitless.
- •The revolution in the transportation industry has been made possible by IoT technologies which are less likely to become obsolete in the near future.
- •The applications of IoT in transportation are not limited to traffic management, real-time tracking, self-driving cars and security, and as the future prevails, IoT will continue to make transportation smarter.







A smart city uses Internet of Things (IoT) sensors in urban areas to collect data and automate systems such as traffic, energy use, and waste management. By doing so, smart cities improve the efficiency of urban services, reduce costs, and deliver a higher standard of living.





## ADAPTING IOT IMPLEMENTATION STRATEGY TO THE CITY SIZE



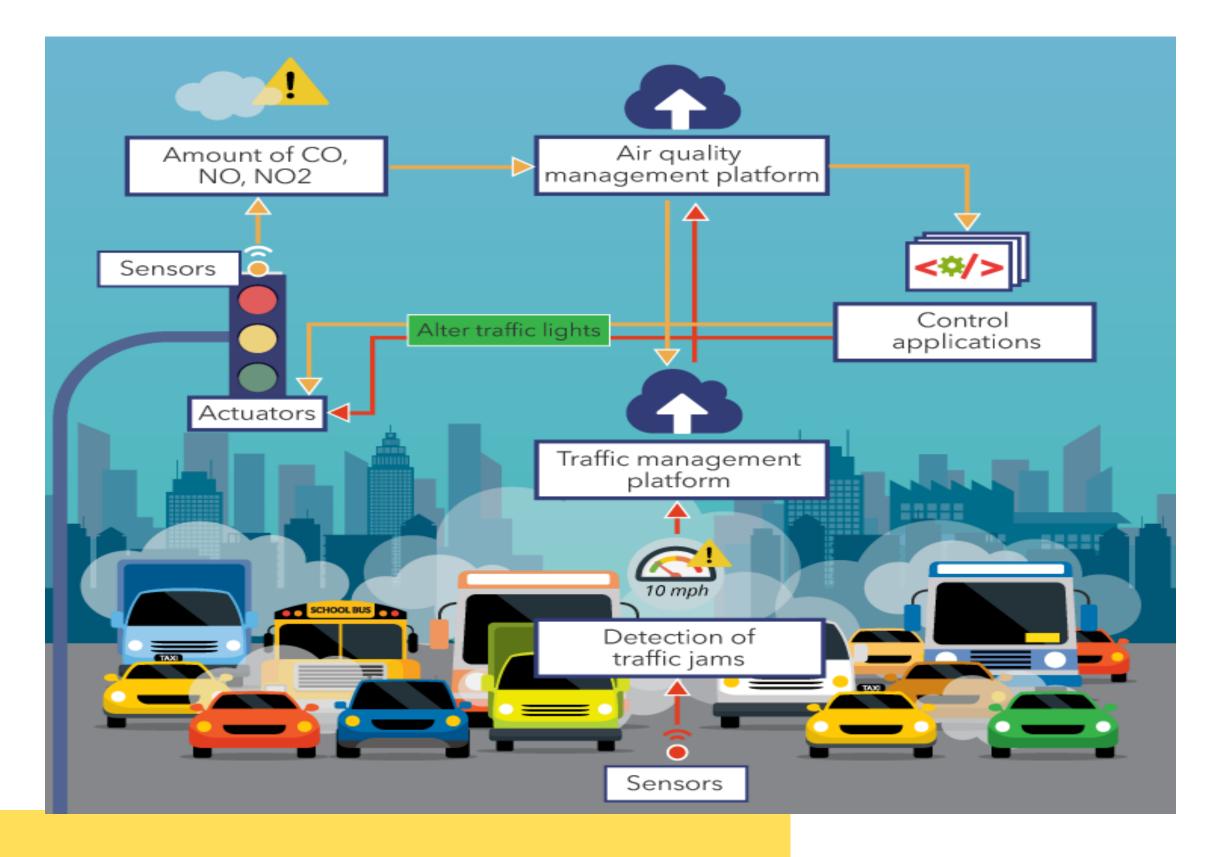
### THE RELEVANCE OF IOT APPLICATIONS FOR SMALLER SMART CITIES

	Highly relevant	Can be implemented with certain restrictions	The value is questionable
Traffic management			
Parking			
Public transport			
Utilities			
Street lightning			
Waste management			
Environment			
Public safety			



# ITERATIVE APPROACH TO IMPLEMENTING SMART CITY SOLUTIONS

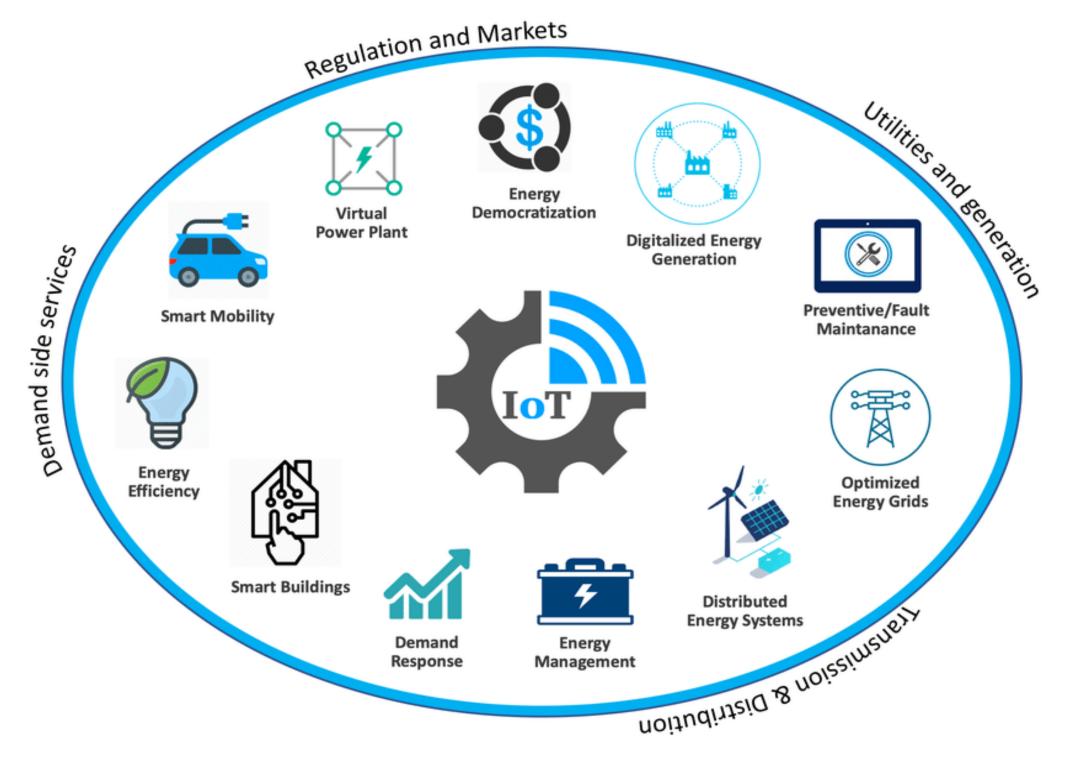






# APPLICATIONS OF IOT IN AN INTEGRATED SMART ENERGY SYSTEM



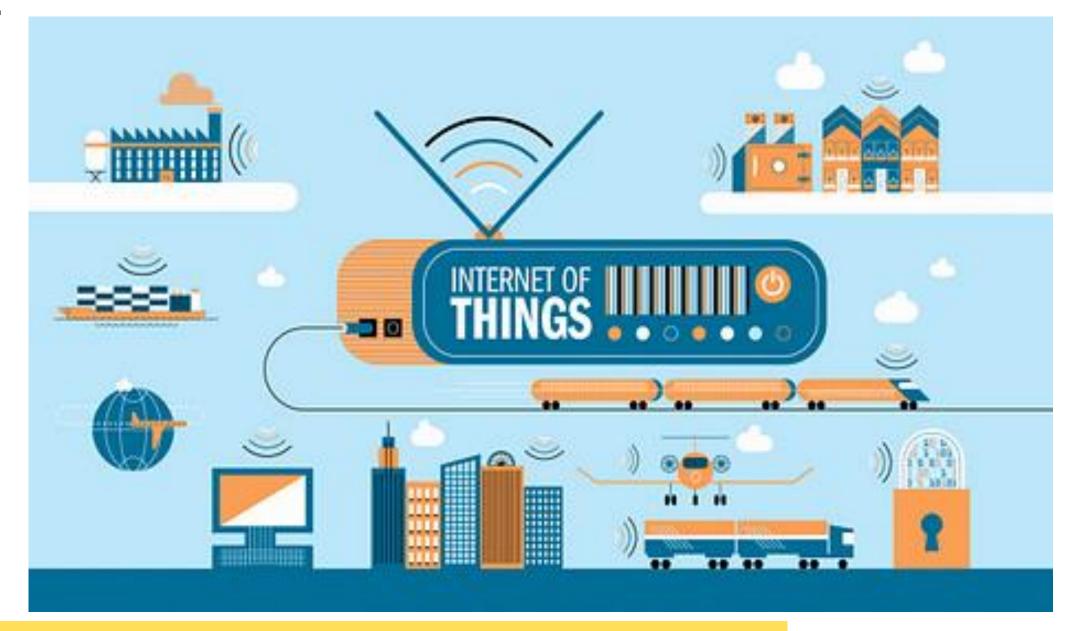






### WHAT IS SMART LIVING IN IOT?

The Internet of Things (IoT) connects smart devices and technologies to provide users with the data to live lives more efficiently. Home Smart Living with the Internet of Things.

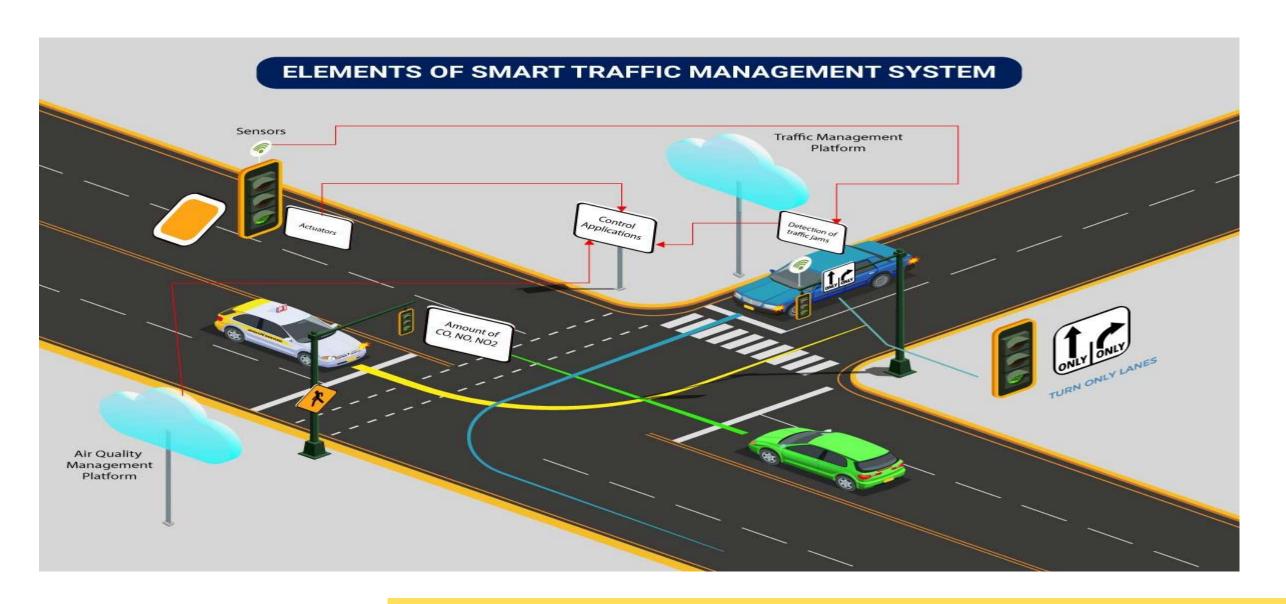




### **ASSESSMENT - 1**



# EXPLAIN THE IMPLEMENTATION PROCESS OF SMART TRAFFIC MANAGEMENT SYSTEM

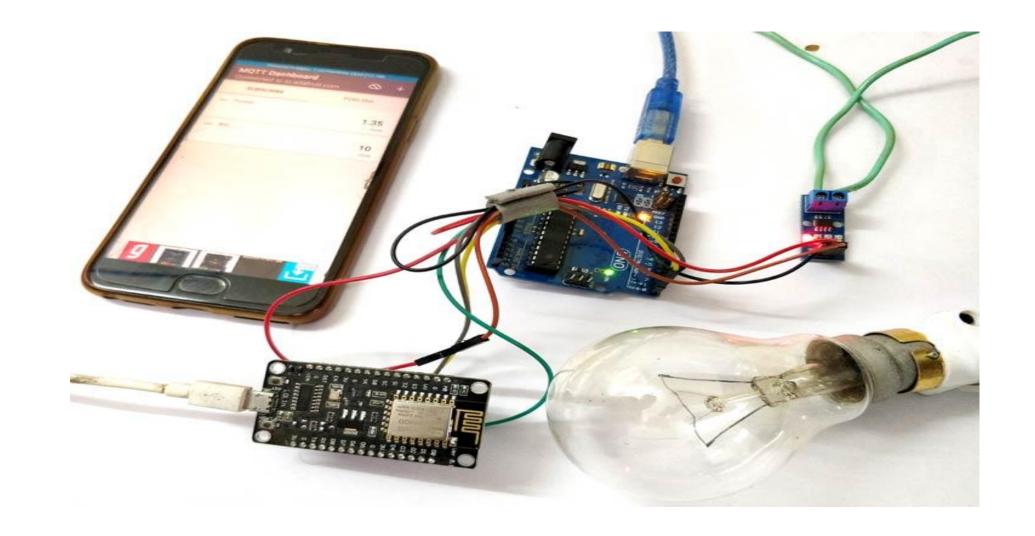




### ASSESSMENT – 2



# DRAW THE BLOCK DIAGRAM OF IOT BASED SMART ENERGY MANAGEMENT SYSTEM





# References



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