

## UNIT 1

What is a system? What is an embedded system? Explain those with examples?
What is an embedded system and history of an embedded system?
Explain the classification of embedded systems
What is an embedded system and explain the purpose of an embedded system?
Classify the differences between the embedded systems and general purpose computing systems
Briefly explain the characteristics of an embedded systems?
What is an embedded system and explain the quality attributes of an embedded system?
What is an embedded system and what are the major application areas of an embedded system?
What is an embedded system design process?
Explain any two examples of an system and embedded system with brief note.

## UNIT 2

Draw the typical block diagram of an embedded system. Explain each and every block.
What is a memory? Explain classification of memory in embedded system?
What is a sensor? Explain the importance of sensor in embedded system?
What is a actuator? Explain the importance of actuator in embedded system?

What is an embedded firmware? Explain briefly?
<p>Explain the following terms:</p> <p>(a) Reset circuit</p> <p>(b) Brownout protection circuit</p>
<p>Explain the following terms:</p> <p>(a) oscillator unit</p> <p>(b) Real time clock</p>
What is a watch dog timer? Explain briefly
Give some examples of domain specific embedded systems briefly
Differentiate between application specific embedded system and domain specific embedded system
Give an example of embedded system-automotive(application specific embedded system) and briefly explain the working of it with neat diagram

### UNIT 3

What are the analog electronic components? Give some examples and explain those examples with neat diagrams
What is serial communication? Differentiate between serial and parallel communication in embedded system
What is wireless communication? Explain briefly with some examples
What is a PCB? Why do we need PCB?
What are the digital electronic components? Give some examples and explain those examples with neat diagrams
Explain timers and counting devices

Explain the following terms:

(a)Resistor

(b)Glue logic

What is parallel communication? Differentiate between serial and parallel communication in embedded system

Explain the following terms:

(a)Diode

(b)Logic gates

Explain the following terms:

(a)Transistor

(b)open collector and tri state output