EMBEDDED SYSTEMS

Unit wise Important Questions

Unit-I

1. Describe the Architecture of 8086 Microprocessor with neat diagram
2. Define Flag and explain about different flags of 8086Microprocessor.
3. Define Addressing mode and explain about different types of Addressing modes of 8086Microprocessor
4. Explain the Memory Segmentation in 8086Microprocessor and Memory organization of 8051Microcontroller.
5. Distinguish between Microprocessor and Microcontroller
6. Describe the Architecture of 8051 Microcontroller with neat diagram

Unit-II

1. Define Embedded System and discuss about the Classification of Embedded Systems
2. Write the differences between Embedded Systems and General Computing Systems
3. Write the Major Application Areas of Embedded Systems
4. Explain the Purpose of Embedded Systems
5. Describe the Characteristics of Embedded systems
6.Discuss about the Quality Attributes of Embedded System

Unit-III

1. Draw the block diagram of typical embedded system & explain in detail about Core of the Embedded System
2. What are Sensors and Actuators and explain the Role of Sensor and Actuators in the Embedded Systems
3. Explain about a) SPI Bus communication interface b) RS232C
4. Explain about a) I2C (Inter Integrated Circuit) Bus communication interface b) Wi-Fi
5. Discuss about the following Communication Interfaces a) Bluetooth b) ZigBee

Unit-IV

1. Explain in detail about Super Loop based approach for Embedded Firmware design
2. Explain in detail about Embedded OS based Approach for Embedded Firmware design
3. (a) Explain the High-level language to machine language conversion process with neat sketch. (b) Explain the advantages and limitations of the high-level language-based Development of embedded firmware.
4. (a) Explain the Assembly language to machine language conversion process with neat sketch. (b) Explain the advantages and limitations of the Assembly language-based Development of embedded firmware.

Unit-V

1. Explain about Data Types, Loops and Pointers.
2. Explain about Structures, Macros and Functions
3.What is object-oriented programming and discuss about Embedded Programming in C++.
4. Discuss about Embedded Programming using Java Language