Syllabus of Embedded System

- Embedded System
  - Introduction to Embedded System
  - History of Embedded System
  - Need of Embedded System
  - Clasification based on Architecture
    - General Purpose microprocessor based system(Von Neumann Architecture).
    - Specific Purpose microcontroller based embeded system(Harvard Architure)
    - Difference between Microprocessor and Microcontroller
    - Difference between Von-Neumann and Harvard Architecture.
  - Clasification based on Processor
    - Reduced Instruction Set Computer
    - Complex Instruction Set Computer
    - Difference between RISC and CISC.
- Introductin to 8051 Microcontroller
  - Features of Microcontroller
  - Components 8051 Microcontroller
    - Internal RAM of 8051 Microcontroller
    - Internal ROM of 8051 Microcontroller
    - Input/Output Port
    - Timer
    - CPU
    - Serial COM Port

- Pin Diagram & Description of 8051

- Register
  - Introduction to Register
  - Special Function Register
- Embedded C
  - Introduction to Embedded C
  - Difference between C and Embedded C
  - Instruction
    - Type Declaration Instruction
    - Arithmatic Instruction
    - Input/Output Instruction
    - Decesion Making Instruction
    - Case Instruction
    - Loop Instruction
- Interfacing of LED
- Interfacing of Seven Segment
- Interfacing of LCD
- Interfacing of Switches & Keyboards
- Interfacing of MOTORS
- Interfacing of LCD
- Interfacing Sensors
- Timer and Counter Programming
- Serial Communication Programming
- Interrupt
- Interfacing of ADC