

## Course Contents

### **UNIT-I** **6L**

#### **Introduction to Microprocessors**

Evolution of Microprocessors, history of computers, Timing and control, Memory devices: Semiconductor memory organization, Category of memory.

### **UNIT-II** **8L**

#### **8-bit Microprocessors (8085)**

Architecture, Instruction Set, Addressing modes, Assembly Language Programming.

### **UNIT-III** **12L**

#### **16-bit Microprocessors (8086)**

Architecture, Physical address, segmentation, memory organization, Bus cycle, Instruction Set, Addressing modes, difference between 8085 & 8086, Assembler Directives, Assembly Language Programming of 8086

### **UNIT-IV** **12L**

#### **Peripheral Interfacing**

Introduction, Types of transmission, 8257 (DMA), 8255 (PPI), Serial Data transfer (8251), Keyboard-display controller (8279), Programmable Priority Controller (8259), 8253, ADC, Application of peripheral devices

### **UNIT-V** **10L**

#### **Advanced Microprocessors**

Introduction to 80186, 80286, 80386, 80486, Pentium microprocessors, introduction To Microcontroller (8051)

**Total 48 Lecture Hours**

