MICRO PROCESSOR AND ITS APPLICATION **Credit : 5**

Intel 8085

1. Introduction : CPU, Register, memory, Buses, Memory addressing capacity of a CPU. Lecture : 3

2. CPU Architecture, Pin configuration, Instructions, Addressing modes, Instruction word size, Languages. Lecture : 4

3. Timing Diagram : Read cycle, write cycle, fetch cycle, Memory read, Memory write, I/O cycle. Lecture : 3

4. Programming : Simple programming : 8-bit addition &subtraction, 16-bit addition , Delay subroutine using register, finding lowest & highest no. in data array. Lecture : 5

5. Data transfer schemes, I/O port. Lecture : 6

6. 8255, 8251, 8253, 8257 chips, pin diagram, control word, operating modes. Lecture : 6

7. Interfacing to ADC, Analog multiplexer, simple & hold. Lecture : 4

Intel 8086

8. Architecture : BIU & Execution unit, pin diagram, function of different modes, Registers.

Lecture : 4

9. Addressing Modes, Instruction Lecture : 4

10. Programming. Lecture : 3

Text Books :

1. Fundamental of Microprocessor & Microcomputer by B.Ram, Dhanpat Rai

2. Advance Microprocessor by B.Ram

Reference Books :

1. Microprocessor & Interfacing by D.V hall,TMH

2. Microprocessor Architecture by R.S Gaonkar

3. Microprocessor with Application in process control by S.I Ahson. TMH

4. Programming Microprocessor Interfaces by Michael Andrews, PHI

5. The Intel Microprocessor Architecture, Programming & Interfacing by B.Brey, PHI