MICROPROCESSOR

Paper Code	**CEN-505**
Course Credits	**4**
Lectures / week	**3**
Tutorial / week	**1**
Course Description	**UNIT – I** Review, Organization and architecture of 8085 Microprocessor, Instructions of 8085 & Programming techniques, Machine Language Vs Assembly Language, Basic concepts of timing & control unit, Timing Diagrams for 8085. **UNIT- II** Minimal System, Necessity for interfacing, Address space partitioning – Memory mapped I / O & I / O Mapped I / O, Advantages and Disadvantages, Types of Interfacing devices – I / O ports, Programmable peripheral interfaces 8255, 8259 (PIC), 8251 (USART), 8253 (Timer), 8279 (Keyboard Controller), Coprocessors. **UNIT- III** Hardware scheme for data transfer – Programmed Data transfer, Interrupt Data Transfer, Various interrupt Schemes, Multiple Interrupt, Enabling, Disabling and Masking of Interrupts Particularly in 8085, DMA & DMA Controller. **UNIT- IV** Study of important 8 – bit Microprocessors & their Comparison, Introduction to 16 – bit processors – 8086, 8088 and 68000 Coprocessor & comparison. Introduction to 32 – bit Microprocessors. **UNIT – V** Microprocessors based system design, Introduction and Basic concept, Introduction to MDS, system Design Kits, Introduction to Microcontroller, Some Practical applications.
References / Text	• A.P. Mathur, “An Introduction to Microprocessors” Tata

Books:

McGraw Hill, 1995.

- K.L. Short, “Microprocessor & Programmed Logic”, 2nd Ed., PHI, 1994
- R.G. Gaonkar, “Microprocessor Architecture programming and application", Wiley Eastern Ltd., 1994.
- Bhurchandi, “Advanced microprocessor”, TMH 2007

Computer Usage / Software Requires:
