

<b>Branch: BCA</b>	<b>Semester-III</b>
<b>Subject Code: 3101</b>	<b>Lecture: 04</b> <b>Credit: 04</b>
<b>Subject Title</b>	<b>INTRODUCTION TO MICROPROCESSOR</b>

<b>Modules</b>	<b>Sr. No.</b>	<b>Topic and Details</b>	<b>No of Lectures Assigned</b>	<b>Marks Weight age %</b>
UNIT-I	1	<b>Introduction to Microprocessors:</b> History and overview, Growth of microprocessor technology from SSI, MSI, LSI to VLSI, Intel , microprocessors-8085 to Pentium-II , performance and feature comparisons, Current global trends in Microprocessors	8	16
UNIT-II	2	<b>8085 Microprocessor:</b> Internal architecture, Pin-out diagram, Memory addressing schemes, System bus structure (Data, address and control bus), Multiplexing and de-multiplexing	8	16
UNIT-III	3	Programming in 8085: Addressing modes , Data movement instructions, Arithmetic and logic instructions, Control instructions	8	16
	4	<b>Interrupts:</b> Introduction, purpose of interrupts, Interrupt vectors, <b>8259-Interrupt Controller</b> , Internal organization, pin out, Single and cascaded operation	8	16
UNIT-IV	5	<b>I/O Interface:</b> Typical I/O interface, serial , communication, 8251 A UART : Internal organization and functioning, 8237 DMA Controller :Block diagram, organization and functioning	8	16
	6	<b>Memory:</b> Type of memory, ROM-PROM, EPROM, EEPROM, (Flash ROM Concept), RAM-SRAM, DRAM, EDO, ECC, SDRAM, Packaging-DIP, SIMM, DIMM, Addressing, memory map, address decoding, Overview of 8086/8088, Overview of 80286, 80386, 80486, Pentium, Pentium II, Pentium III	10	20
		Total	50	100

#### **Text Books:**

- 1) R.S. Gaonkar, "Microprocessor Architecture, programming and Applications with the 8085/8080A", Wiley Eastern Ltd. 2., 1995

#### **References:**

- 1) Peter Norton, "Inside the PC" (Sixth Edition), January 2005
- 2) Yu-Cheng Liu & Glen A. Gibson, "Microprocessor System-The 8086/8088 Family" :
- 3) Barry Brey "The Intel Microprocessor : 8086/8088 , 80286, 80386, Pentium, Pentium Pro. Pentium-II & III" Pearson Prentice Hall, 2009