SARDAR PATEL UNIVERSITY
Programme: BCA
Semester: III
Syllabus with effect from: June-2012

Paper Code: US03EBCA01	Total Credit: 2
Title Of Paper: Introduction to Microprocessors	

Unit	Description in detail	Weighting (%)
I	**Introduction** Microprocessor evolution The 8086 microprocessor family overview 8086 internal architecture : the execution unit, the bus interface unit Overview of 8086 register set The concept of assembler	25%
II	**8086 Instruction Descriptions – I** Arithmetic Instructions : Aaa, Aad, Adc, Sub, Sbb, Div, Mul Logical Instructions : And, Or, Not Other Instructions : Mov, Cmp, Neg, Dec, Inc	25%
III	**8086 Instruction Descriptions – II** Rotate And Shift Instructions : Rol, Ror, Shl, Shr Unconditional & Conditional Jump Instructions Unconditional & Conditional Loop Instructions	25%
IV	**8086 Programming Using Assembly Level Language** The Structure Of A Typical Assembly Program The Concept Of Assembler Directives Implementation Of Control Structures : If-Then, If-Then-Else, Multiple If-Then-Else Implementation Of Looping Structures : While-Do, Repeat-Until Programming Based On Units 2,3,4	25%

Basic Text & Reference Books :-

- Hall, D. V. : "Microprocessor & Interfacing : programming and Hardware", Tata McGraw-Hill, 2003.
- Abel P. : IBM PC Asembly Language and Programming, 5th edition, Prentice-Hall of India Pvt. Ltd., 2001