

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: B.sc (Instrumentation)**  
**Semester: V**  
**Syllabus with Effect from: June - 2013**

<b>Paper Code: US05CINS01</b>	<b>Total Credit: 3</b>
<b>Title Of Paper: 8085 Microprocessor Architecture &amp; Programming - I</b>	

Unit	Description in detail	Weighting (%)
I	Microprocessors (P): A P as a Programmable Device; Machine Language, 8085 Assembly Language, High - Level Languages, 8085 Programming Model: 8085 Hardware Model, 8085 Programming Model; Instruction Classification, Instruction, Data Format, and Storage: Instruction Word Size	25%
II	P Architecture and its operations: P - Initiated Operations and 8085 Bus Organization; Memory: Latch as a Storage Element, Memory Map and Addresses; Input and Output (I/O) Devices: Peripheral - Mapped I/Os, Memory - Mapped I/Os; Logic Devices for Interfacing: Tri - State Devices, Buffer, Decoder, Encoder	25%
III	The 8085 MPU: The 8085 P, P Communication and Bus Timings, Demultiplexing the Bus AD7 - AD0, Generating Control Signals, A detailed look at the 8085 MPU and its Architecture	25%
IV	Data Transfer Operations, Arithmetic Operations, Logic Operations, Branch Operations	25%

**Basic Text & Reference Books:-**

- Microprocessor Architecture, Programming, and Application by Ramesh. S. Gaonkar
- Understanding 8085/8086 Microprocessor and Peripheral ICs Through Questions and Answers By S. K. Sen
- Microprocessor (8085) by B. Ram

