

**SARDAR PATEL UNIVERSITY**  
**Programme: B.Sc (Electronics)**  
**Semester: V**  
**Syllabus with effect from: June - 2013**

<b>Paper Code: US05CELE03</b>	<b>Total Credit: 3</b>
<b>Title of Paper: 8-Bit Microprocessor Programming &amp; Applications</b>	

<b>Unit</b>	<b>Description in detail</b>	<b>Weightage (%)</b>
I	The 8085 Microprocessor unit, Bus timing, Demultiplexing the bus, Generating control signal, A detailed look at the 8085 Microprocessor and its architecture, Examples of 8085 based microcomputer.	<b>25%</b>
II	Instruction classification, Instruction Format, Method of wiring and executing a simple program, Instruction timing and operation status, Addressing modes.	<b>25%</b>
III	Data transfer Instruction set, Arithmetic instruction set, Logical instruction set, program related to Arithmetic and logical instruction.	<b>25%</b>
IV	Branch operations and their related programs, writing assembly language programs, Debugging a program, programming techniques : Looping, Counting and Indexing and their related flow charts, Additional Data transfer and 16 bit Arithmetic instruction and related program.	<b>25%</b>

**Basic Text & Reference Books:**

- Microprocessor , Architecture, Programming and Applications with the 8085/8080 By : Ramesh S. Gaonkar

