## SARDAR PATEL UNIVERSITY

**Programme: B.Sc (Electronics)** 

**Semester: V** 

Syllabus with effect from: June - 2013

Paper Code: US05CELE02	Total Credit: 3
Title of Paper: Digital System	Total Credit: 5

Unit	Description in detail	Weightage (%)
I	Shift Registers	
	Introduction, Buffer Register, Controlled Buffer Register, Data Transmission	
	in shift registers, Serial-in serial-out shift registers, serial-in parallel-out shift	25%
	registers	
	Parallel-in serial-out shift register, parallel-in parallel-out shift registers.	
II	Bidirectional shift registers, Universal shift register, Dynamic shift registers,	
	Application of shift registers, ANSI/IEEE standard symbols, Tristate switch,	25%
	PLA Device.	
III	The look ahead carry adder, IC parallel Adders, Two's complement Addition	
	and Subtraction using parallel Adders, Serial Adders, BCD Adder, Binary	25%
	Multipliers, Comparators, IC comparators.	
IV	Interfacing Logic Families, Interfacing with Bases, Interfacing Digital &	
	Analog system, Modems & Interfaces, The Schmitt Trigger as an Interfaces	25%
	circuit.	

## **Basic Text & Reference Books:**

➤ Fundamental of Digital circuits By : A.Anand Kumar

Digital Integrated Electronics By: Herbert Taub & Donald Schilling

Digital FundamentalBy: Floyd

