

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc (Electronics & Communication)
Semester: IV
Syllabus with Effect from: June - 2012

Paper Code: PS04CELC03	Total Credit: 4
Title Of Paper: Telecommunication Switching System	

Unit	Description in detail	Weightage (%)
I	Evolution of Telecommunication, Simple Telephone Communication, Basic of a Switching System, Rotary Dial Telephone, Signaling Tones, Stronger Switching Components. Step-by-Step Switching, Design Parameters	20%
II	Principals, of Common Control, Touch Tone Dial Telephone, Principals of Crossbar Switching. Crossbar Switch Configurations, Cross point Technology	20%
III	Stored Program Control, Centralized SPC, Distributed SPC, Enhanced Services, Two-Stage Networks, Three-Stage Networks, Basic Time Division Space Switching, Basic Time Division Time Switching, Time Multiplexed Space Switching, Time Multiplexed Time Switching Combination Switching, Twice - Stage Combination Switching.	20%
IV	Network Traffic Load and Parameters. Grade of Service and Blocking Probability. Modeling Switching Systems, Incoming Traffic and Service Time Characterization, Blocking Models and Loss Estimates. Delay Systems.	20%

Basic Text & Reference Books:-

- Telecommunication Switching System and Networks: Thiagarajan Viswanathan, Prentice Hall India.
- Principles of Communication Systems: Taub & Schilling, Tata McGraw Hill.

