

SARDAR PATEL UNIVERSITY
Programme & Subject: Master of E-Business (M.Eb)
Semester: II
Syllabus with Effect from: June-2010

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|---|------------------------|
| Paper Code: PM02EMEB04 | Total Credit: 4 |
| Title Of Paper: Data Communication & Computer Networks | |

| Unit | Description in Detail | Weightage (%) |
|------|--|---------------|
| I | Fundamentals: Network Concept - Definition of Network & Networking - Required Network – Elements - Models of Network Computing - Network Configuration - Models of Network - Types of Network - Protocols & Standards - Standards Organizations - Layered Architecture - OSI Model - The Internet Model - IEEE Standards | 25% |
| II | Data Transmission: Analog and Digital Signals - Digital and Analog Transmissions – Multiplexing - Guided Media - Unguided Media - Transmission Impairment – Performance - Error Detection | 25% |
| III | LAN Topologies & Devices: Introduction - Bus Topology - Star Topology - Ring Topology - Hybrid Topology - Flow Control - Medium Access Methods - Repeaters – Hubs – Switches – Routers – Bridges - Other LAN Connectivity Devices | 25% |
| IV | Connecting LANs: Ethernet: Layers: MAC Layer and Physical Layer, 10 Mbps Implementation, Introduction to Fast Ethernet and Gigabit Ethernet - Token Ring: MAC Layer, Physical Layer, Ring Management – Wide Area Network – Different WAN Mediums and Topologies | 25% |

Basic Text & Reference Books:-

- Data Communications and Networking by Behrouz A Forouzan
- Networking – The Complete Reference by Zaker
- Computer Networks by Andrew S Tanenbaum

