

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc – Information Technology (Integrated)
Semester: VII
Syllabus with Effect from: June-2015

Paper Code: PS07CIIT04	Total Credit: 4
Title Of Paper: Advance Computer Networking	

Unit	Description in Detail	Weightage (%)
I	Routing Algorithms and Congestion Control Routing Algorithms General Principles of Congestion Control Congestion Prevention Policies	25%
II	Internetworking How Networks Differ, How Network Can be Connected, Concatenated Virtual Circuits, Connectionless Internetworking, Tunneling, Internetwork Routing, Fragmentation Issues arising when different types of networks are inter connected	25%
III	The Application Layer DNS-The Domain Name System, the DNS Namespace, Resource Records, Name Servers. Electronic Mail - Architecture and services, message transfer The World Wide Web	25%
IV	Network Security Cryptography Symmetric-Key Algorithms Public-Key Algorithms Communication Security	25%

Basic Text & Reference Books:-

- Tanenbaum A. S., Computer Networks, Prentice-Hall of India Pvt. Ltd., New Delhi, 4th Edition, 1997.
- Douglas E. Comer, “Internetworking with TCP/IP - (Vol. 1) Principles, Protocols, and Architecture”, Prentice Hall of India (PHI) Publishers, 6th Edition, 2013.
- Behrouz A. Forouzan, “TCP/IP Protocol Suite”, McGraw-Hill, 4th Edition, 2009.

