## SARDAR PATEL UNIVERSITY Programme: BBA (Information Technology Management) Semester-IV Syllabus with effect from:November/December-2012

Paper Code: UM04CBBI06	Total Credite?
Title of Paper: Computer Networks	- Total Credit:3

Unit	Description in detail	Weighting (%)
Ι	Basics of Networking	
	Introduction of networking (Definition), Advantages and Disadvantages of	25%
	networking, LAN, MAN, WAN, LAN Components, OSI model	
II	Networking Media and Devices	
	Types of transmission media (Introduction & Definition), Guided Media	
	(Twisted pair cables, Coaxial Cables, Optical fibers), Unguided Media (RF	25 %
	(Definition & diagram of Radio Communication Band only), Terrestrial	
	Microwave), Connecting Devices (NIC, Hubs, Switches, Bridges, Router)	
III	Transmission Technology	
	Digital and Analog Transmission, Transmission mode(Half Duplex and Full	
	Duplex Transmission), Serial Transmission, Parallel Transmission,	25 %
	Synchronous & Asynchronous Transmission, Transmission Impairment	
	(Attenuation, distortion, Noise)	
IV	Topology and Protocols	
	LAN Topologies (Bus, Star, Ring, Tree, Mesh, Intersecting Rings),	25 %
	Protocols (Definition), Need of Protocols, Protocols (CSMA/CD, CSMA/CA)	
	TCP&IP Header	

## **Basic Text & Reference Books**

- > Data Communications and Networking 2nd Edition: B. A. Forouzan, TMH
- Computer Networks: Andrew S Tannenbaum 3rd Edition, Pearson-Prentice Hall
- Local Area Networks: B. A. Forouzan, TMH

