

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: BBA (Information Technology Management)**  
**(3 Years)**  
**Semester: II**  
**Syllabus with effect from: December - 2015**

<b>Paper Code: UM02EBBI06</b>	<b>Total Credit: 3</b>
<b>Title Of Paper: Networking Technologies</b>	

Unit	Description in Detail	Weightage (%)
I	<b>Switching &amp; Multiplexing</b> Introduction to Networking: Need, Advantages and Disadvantages - Computer Communication and need to transmit data over long distances - Types of Networks and their characteristics - Difference between Multi-user system and LAN - Layered Model for LAN/WAN internetworking	25%
II	<b>Switching &amp; Multiplexing</b> Introduction to Switching (Circuit Switching, Packet Switching, Message Switching) - Introduction to Shift Keying (Amplitude Shift keying (ASK), Frequency Shift Keying (FSK), Phase Shift Keying (PSK)) - Frequency Division Multiplexing (FDM) - Time Division Multiplexing (TDM)	25%
III	<b>Communication Protocols &amp; Ethernet</b> Protocols - Need of protocols? - Protocol Hierarchy - Asynchronous Transmission - Synchronous Transmission – HDLC - SNMP (Simple Network Management Protocol): SNMP Model, Types of Ethernet (Standard, Fast, Giga Bit), Applications of Ethernet (10 Base 2, 10 Base 5, 10 Bases - T, 10 Bases – F)	25%
IV	<b>TCP/IP</b> Overview of TCP/IP – Network Layer(IPv4) – Addressing – Subnetting – Other Protocols in the Network Layer(ARP) – Transport Layer(TCP) – Next Generation: IPV6	25%

**Basic Text & Reference Books:-**

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

