2.16 30322 COMPUTER NETWORKS

UNIT-1 DATA COMMUNICATIONS

- 1.1 Components of a data communication
- 1.2 Types of Networks
- 1.3 Signals and Modulation
- 1.4 Transmission Media
- 1.5 Network devices

UNIT-2 OSI MODEL AND DATA LINK LAYER

- 2.1 Network Models
- 2.2 Error detection & correction
- 2.3 Flow and Error control
- 2.4 Flow control protocols

UNIT-3 LAN PROTOCOLS

- 3.1 Character oriented Protocol Chartered Ingineer 2nd
- 3.2 802.X Protocols
- 3.3 FDDI
- 3.4 Switching
- **3.5 ISDN**

UNIT-4 TCP/IP SUIT

- 4.1 Overview of TCP / IP
- 4.2 Network Layers Protocol
- 4.3 IP Addressing
- 4.4 Application Layer Protocols

UNIT-5 INTRODUCTIONS TO NETWORK SECURITY

- 5.1 Introduction to network security
- 5.2 Types of attacks
- 5.3 Hacker Techniques
- 5.4 Threats & Firewall

Reference Books:

- 1 Data Communication and networking by Behrouz A.Forouzan Tata McGraw-Hill
- 2. Computer Communication Networks by Achyut S. Godbole Tata McGraw-Hill
- 3. Data and Computer Communications by William Stallings, Prentice-Hall of India
- 4. Computer Networks by Andrew S. Tanenbaum, Prentice-Hall of India, New Delhi
- 5. Network Security a beginner's Guide by Eric Maiwald, Tata Mc Graw-Hill.