

Core Course XI - Computer Networks

Unit 1:

Introduction: Uses of Computer Networks - Network Hardware - Network Software - Reference Models - Example Networks.

Unit II

The Physical Layer: Guided Transmission Media - Wireless Transmission - Communication Satellites - The Public Switched Telephone Network

Unit III

The Data Link Layer: Data Link Layer Design Issues - Error Detection and Correction - Elementary Data Link Protocols - Sliding Window Protocols

Unit IV

The Network Layer: Network Layer Design Issues - Routing Algorithms - Congestion Control Algorithms- Quality of Service – Internetworking

Unit V

The Transport Layer: The Transport Service (6.1.1, 6.1.2, 6.1.3) - The Application Layer: Dns--Domain Name System - Electronic Mail - The World Wide Web (7.3.1)

Text Book:

1. Computer Network, Fourth edition, Andrew S. Tanenbaum, Prentice Hall, 2006.

Reference Book:

1. Data Communications & Computer Networks, Prakesh C. Gupta Prentice-Hall of India, 2006.