


CSE3151

COMPUTER NETWORKS



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CSE3151: Computer Networks
75 Marks [70% Exam, 20% Quizzes/Class Tests, 10% Attendance]
3 Credits, 33 Contact hours, Exam Time: 4 hours

Introduction: Computer Networks, Network Models, Network Architecture, Network Topology, Network Performance, Network Security, Network Management, Network Planning, Network Design, Network Implementation, Network Maintenance, Network Troubleshooting.

Physical Layer: Circuit switch, reference model.

Medium Access Sublayer: Collision detection and collision free protocols.

Data Link Layer: Types of ARQ, Go-Back-N ARQ, Stop-and-Wait.

Network Layer: Internet addressing, flooding, distance vector routing.

Transport Layer: UDP, TCP, congestion control algorithms.


Presentation Layer: Data Encoding.

Application Layer: Internet Wide Web (WWW), DHCP, DNS, Server, Proxy server, FTP, network maintenance, network security.

Networking in Practice: Data Server, Proxy server, FTP, network maintenance, network security.

Books Recommended:

1. Behrouz A. Forouzan	TCP/IP Protocol Suite, McGraw-Hill
2. Andrew S. Tanenbaum	Computer Networks, Prentice Hall
3. William Stallings	Data and Computer Communications, Prentice Hall
4. Behrouz A. Forouzan	Data Communications and Networking, McGraw-Hill



Cell relay, ATM, RA, CSMA with collision, flow control, Stop & wait, shortest path algorithm, Refusing Connection, Context Dependent, IP, Telnet, HTTP, World Wide Web, Configuring: Directory network troubleshooting.

