Chapter 5

- 5.1 Store-and-Forward Packet Switching, Services Provided to the Transport Layer, Implementation of Connectionless Service, Implementation of Connection-Oriented Service, Comparison of Virtual-Circuit and Datagram Networks
- 5.2 Routing Algorithms in a Single Network, The Optimality Principle, Shortest Path Algorithm, Distance Vector Routing, Link State Routing, Hierarchical Routing within a Network, Broadcast Routing, Multicast Routing, Anycast Routing
- 5.3 Congestion, Traffic-Aware Routing, Admission Control, Load Shedding, Traffic Shaping, Explicit Congestion Notification, Hop-by-Hop Backpressure
- 5.4 Application QoS Requirements, Overprovisioning, Packet Scheduling, First-In First-Out (FIFO) Scheduling, Fair Queueing, Improved Fair Queueing, Weighted Fair Queueing
- 5.5 Internetworks, How Networks Differ, Connecting Heterogeneous Networks, Connecting Endpoints Across Heterogeneous Networks, Supporting Different Packet Sizes: Packet Fragmentation,
- 5.6 Software-Defined Networking,
- 5.7 The Network Layer in the Internet: 10 principles, The IP Version 4 Protocol
- 5.8 Policy at the Network Layer