

Important questions of CN

Unit-I

1. Comparison of the OSI and TCP/IP reference model
2. Explain in detail about Guided Media (Twisted pair, Coaxial cable and fiber optic cable)
3. Explain in detail about Unguided Media (Wireless waves, microwaves and infrared)
4. Discuss in detail about Network topologies(Ring, star, bus, mesh etc..)
5. Types of networks- LAN, MAN and WAN

Unit-II

1. Explain design issues of data link layer
2. Explain about elementary data link layer protocols
3. What is framing? Explain fixed and variable size framing.
4. Discuss about error detection and correction codes
5. Generate checksum at sender side and verify it receiver side with example
6. Explain in detail about hamming code.
7. Explain about sliding window protocols- one bit, goback N, and selective repeat
8. Multilink ppp
9. Multiplexing- FDM,TDM, CDM

Unit-III

1. Difference between pure aloha and slotted aloha.
2. Explain in detail controlled access protocols- reservation, polling and token passing
3. Discuss in detail CSMA, CSMA/CD and CSMA/CA.
4. What is Ethernet? And explain the following in detail
 - i) Fast ethernet
 - ii) Gigabit ethernet
 - iii) 10 Gigabit ethernet
5. Explain about channelization protocols(TDMA, FDMA &CDMA)
6. Explain different classes of networks- Class A, B, C, D and E

Unit IV

1. Differentiate Virtual Circuit and Datagram Networks
2. Explain in detail about optimality principle
3. Explain in detail about count to infinity problem.
4. What is flooding? Explain the process of flooding.
5. Apply Distance Vector Routing protocol to find minimum cost with an example
6. Explain about link state and hierarchical routing algorithms.
7. Define congestion and demonstrate leaky bucket algorithm with neat sketch.
8. Compare Internet Protocol (IPv4 and IPv6).
9. Explain design issues of Network layer.
10. Explain various messages of ICMP protocol.
11. What is congestion? Explain about congestion policies and quality service

Unit V

1. Discuss User Datagram Protocol (UDP) in Transport layer.
2. Explain about Transmission Control Protocol (TCP) in Transport layer.
3. Write a short note on WWW and DNS.
4. Explain about HTTP, Email security
5. Explain about TELNET.
6. Discuss in detail about SNMP protocol.
7. Illustrate electronic mail and its architecture.