Question Bank

Q - 1 What is Network topology? Explain different network topologies with Example and compare them.

Q - 2 What is OSI model? Explain duties of different layers of OSI model in detail.

Q - 3 Explain TCP/IP Reference model in detail and compare OSI and TCP/IP Reference model.

Q - 4 Explain Connection oriented Networks: (a) X.25 (b) Frame Relay

Q - 5 Explain PSTN in detail.

Q - 6 Explain FDM, TDM and WDM with respect to its use in Telecommunication Technologies.

Q - 7 Explain the following LANs: (a) Token ring (b) Ethernet

Q - 8 Compare Packet switching and Circuit switching.

Q - 9 Compare Twisted pair, Co-Axial, and Optical Fiber Cable.

Q - 10 Explain Sliding window Protocols in detail.

Q - 11 Explain the need of Sliding Window Protocol at Data Link Layer. Prove that Selective Repeat will offer minimum channel overhead as compared to its all other variants.

Q - 12 Explain the Channel allocation problem.

Q - 13 Explain with the throughput expressions The ALOHA and Slotted ALOHA. Also discuss which technique is better.

Q - 14 What is Data Correction and Detection Code? Explain any two with Suitable Example.

Q - 15 List the Data Link Layer design issues. What is framing? List all methods used for framing and Explain any two methods used for framing in detail.

Q - 16 Compare Packet switching and Circuit switching.

Q - 17 What is Quality of Service? What is its significance? List the techniques available to improve Quality of Service and explain any two of them in detail.

Q - 18 What is congestion control? Why it is required? List all policies used for the congestion control. Explain any two policies used for the congestion control in detail.
Q - 19 Differentiate Static and Dynamic Routing with examples. Explain Distance vector Routing Algorithm in detail with required diagrams.
Q - 20 What are the issues available in transport layer list them all and explain each issue in short.
Q - 21 What are the issues available in transport layer list them all and explain each issue in short.
Q - 22 Explain TCP segment format in detail.
Q - 23 Explain UDP in detail with its datagram and pseudo header.
Q - 24 List the Multiple access protocols used for the wireless network and explain any two of them in detail.
Q - 25 What is Domain Name System? Explain Recourse records and Name server for the Domain Name System.
Q - 27 What is Digital Signature? List the methods used for Digital Signature and explain them in detail.
Q - 28 What is cryptography? Explain Symmetric Key Algorithms in detail.
Q - 29 What is VoIP? Compare and Contrast H.323 and SIP for Voice over IP Applications.
Q - 30 List out the communication securities. Also explain IPsec and Firewalls.