

Describe the advantages and disadvantages of bus topology.
Compare between simplex, half duplex & full duplex communication with a suitable example.
Define computer Networks.
Explain the significance of line coding in computer networks.
Compare transport layer and data link layer?
Recall the types of Transmission medium in Computer Networks
Discuss the concept of error detection in Networks.
Assume 6 devices are arranged in a mesh topology. How many cables are needed? How many ports are needed for each device?
State the need for error detection and error correction in the data link layer.
Differentiate between LAN, MAN, and WAN

Explain the role of a switch in data communication and describe its operation.
Write short notes on Session layer of OSI reference
Discuss the mesh and star topologies along with its merits and demerits.
Write short notes on Transport layer of TCP/IP
Discuss in detail the types of line coding with diagrams
Describe the hybrid topology consisting of star, bus and ring along with its advantages and disadvantages.
Illustrate different types of errors with an example.
Explain the concept of Cyclic Redundancy Check with an example.

Analyse the OSI Layer with a neat diagram and describe the role of each layer in data communication
Examine the necessity of redundant bits for error detection. Explain about it through VRC and CRC.
Describe the functions of modems and explain the RS-232 interface in detail.
Elaborate the operation and importance of Coaxial Cable and Fiber Optics and list out its advantages and disadvantages.
Analyse in detail about error correction using Check sum methods.