1. mention and explain the five major components in a standard computer network architecture, and how they interact to provide reliable and efficient connectivity?

2. Explain the difference between a local network (LAN) and a wide area network (WAN). Give examples of situations where each type of network is more appropriate?

3. What is TCP/IP protocol? Explain the basic structure of the protocol, as well as the role and function of each layer in TCP/IP?

4. A network administrator is planning to implement a network with a star topology. Explain the characteristics of star topology, as well as its advantages and disadvantages compared to other network topologies such as bus or ring?

5. How would you design a computer network that can handle huge data traffic efficiently? Describe the technologies and strategies that can be used to increase throughput and reduce latency in such networks?

6. Tell me about physical layer in Open Systems Interconnection?