## **Assignment I**

- 1. What is computer network? Explain client-server and peer-to peer model of computer network.
- 2. State pros and cons of computer network. Describe the application areas of computer network.
- 3. Explain various LAN topologies.
- 4. What is transmission impairments? State and explain in brief different factors of transmission impairments.
- 5. Define frequency and bandwidth. Differentiate between synchronous and asynchronous transmission.
- 6. Describe simplex, half duplex and full duplex modes of transmission with example.
- 7. Describe FDM (Frequency division multiplexing) and TDM (Time division multiplexing).
- 8. Why modulation technique is important in data communication? Describe different types of modulation technique use in network.
- 9. Describe message switching, circuit switching and packet switching.
- 10. What is OSI reference model? Explain its layers with clear diagram.
- 11. What is protocol stack? Describe hub, bridge, switch and repeater.
- 12. What is transmission media? Explain guided transmission media used in network.
- 13. Describe unguided transmission media used in computer network.
- 14. How ISDN is different from PSTN?