**Assignment**

**B.Tech CE Sem-IV**

**CE313 – Computer Networks**

1. Discuss types of Virtual Circuits.
2. Explain Classful Addressing.
3. Write rules for assigning Network Id and Host Id.
4. What is CIDR Block? Discuss the rules for CIDR Block.
5. Perform CIDR aggregation on the following IP Addresses-
   128.56.24.0/24
   128.56.25.0/24
   128.56.26.0/24
   128.56.27.0/24
6. What is subnetting? Discuss its types.

7. A big single network is having IP Address 200.1.2.0. Divide this network into 4 subnets.

8. Suppose a network with IP Address 192.16.0.0. is divided into 2 subnets, find number of hosts per subnet.
   Also for the first subnet, find-
          Subnet Address
          First Host ID
          Last Host ID
          Broadcast Address.
9. Discuss Distance Vector Routing Algorithm.

10. Discuss the services provided by Transport Layer.

11. Discuss TCP header.

12. Explain UDP datagram format.

13. What is DNS? Discuss DNS resolution.

14. Discuss Hyper Text Transfer Protocol.

15. What is persistent and no-persistent connection.

16. Discuss SMTP.

17. Explain File Transfer Protocol.

18. What is Firewall?

19. Explain How does a Firewall work?

20. Explain types of Firewall.

21. What is VPN?

22. Explain types of VPN.

23. Discuss benefits and limitations of VPN.