**Module 3**

1.What is flooding? Describe any two situations where flooding is advantageous. (3)

2. Write short note on RIP. (3)

3. Explain OSPF routing algorithm. (5)

4. Discuss about the routing for mobile hosts. (4)

5. Differentiate between Flooding and broadcasting (3)

6. Explain how routing is performed using link state algorithm? Illustrate with an example. (6)

7.Give the relevance of age field in a link state packet. (3)

8. Differentiate between static and dynamic routing. (3)

9. Explain distance vector routing with an example. (6)

10.Explain the different steps in link state routing. (5)

11. a) How routing is handled in mobile hosts? (4)

12.List the features of RIP. (3)

13. List the message types in OSPF. (3)

**Module 4**

1.Compare classfull and classless addressing, giving examples for both. (3)

2. List and explain any three closed loop congestion control techniques. (3)

3. Describe the format of IPv4 datagram with the help of a diagram, highlighting the significance of each field.(5)

4.Define Subnetting. What are the advantages of Subnetting? Explain with an example (3)

5.Discuss the common techniques used in computer networks to improve the QoS. (4)

6. Differentiate classfull and classless addressing schemes (4)

7.Discuss about any two congestion control algorithms. (4)

8. How token bucket algorithm performs congestion control? (3)

9.List the private IP address ranges of class A, B and C? (3)

10. Explain any two congestion control algorithms

11 What is QoS? Explain any two methods to ensure QoS. (6)

12 Subnet the Class C IP Address 206.16.2.0 so that you have 30 subnets. What is the subnet mask for the maximum number of hosts? How many hosts can each subnet have? (3)

13. What is IP subnetting? Illustrate with example. (3)

**Module 5**

1.Differentiate between BOOTP and DHCP. (5)

2.Explain how routing is done using BGP (5)

3.. List and explain the different types of error reporting messages used by ICMP. (3)

4. Draw and explain the datagram format for IPv6. (5)

5 How does BGP avoid count to infinity problem? (3)

6.Draw the IPv6 fixed header format. (3)

7. Explain the role of ICMP. (4)

8. Define address resolution problem. Explain about RARP (6)

9. Give the importance of BOOTP. (4)

10 Discuss about the issues with IPv6 (3)

11.Explain how IGMP supports internet multicasting (7)

12.Draw and explain the message format for the ICMP echo request and echo reply messages. (5)

13. Explain about the controversies regarding IPv6 (5)

14. How BOOTP performs when the client and the server are on different networks? (5)

15. What is multicasting? Mention the role of IGMP in IP multicasting. (5)

16 How the routing updates are communicated among different Autonomous systems? Give the features of any one Exterior Gateway Protocol. (6)

17. Draw and explain IPv6 header format. (4)