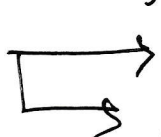# Module-3
Network layer QB.

1. Explain Servies provided by Network layer.

2. Explain Datagram Approach : Connection less Services using diagram.

3. Explain Virtual Ciruit Approach: Connection Oriented Sermies with a neat diagram. (explain All phases)

4. Explain IPV4 & IPV6 Addressing Techniques.

5. A classless Address is given as

   167.199.170.82/27

   find the i> no of addresses   ii> last address
   iii> first address.

   using → normal approach
   & Address mask approach.

6. With a neat diagram explain Operation of DHCP.

7. Using One IP Address method explain NAT

8. Explain following souting Algorithms
   i> Least Cost Routing (LCR)
   ii> Distance Vector   iv> Path vector routing.
   iii> Link state Routing

9. Explain Different types of Autonomous System.

10. How shortest path will be found out using Routing Information protocol. (RIP)

11. Explain Open Shortest Path First (OSPF) protocol with an examples & diagram.

12. With neat diagram of flow explain Route selection procedure in Border Gateway Protocol (BGP4)

13. Explain BGP4 protocol & messages.