

129

**Q.P. Code : 588502**

**(3 Hours)**

**[Total Marks : 80**

- N.B. :** (1) Question No.1 is **compulsory**.  
(2) Solve **any Three** out of remaining questions.  
(3) Assume suitable **data** wherever **required**.  
(4) **Answers** to the questions should be **grouped** and **written** together.

1. (a) Draw sublayer of data link layer. Explain the role of each layer. **5**  
(b) Differentiate the host to host delivery provided by data link layer and network layer. **5**  
(c) What is socket address? Explain with example. Comment on socket programming. **5**  
(d) Compare between circuit switching and packet switching. **5**
2. (a) List the role of application layer and explain one application layer protocol. **10**  
(b) Classify unicast routing protocol. Explain exterior routing protocol in brief. **10**
3. (a) Compare between Ethernet LAN and IEEE 802.11 WLAN. **5**  
(b) What is DSL and HFC? Describe in brief. **5**  
(c) What is peer to peer communication? Describe decentralized peer to peer sharing. **10**
4. (a) What are the performance parameters of network? Explain in brief. **5**  
(b) Classify multiple access techniques. Explain CSMA/CA technique with backoff algorithm. **5**  
(c) Describe in details the physical transmission media for computer communication networks. **10**
5. (a) What are the demerits of Distance Vector algorithm? How it is overcome? **10**  
(b) What is tunneling? Explain Automatic Tunneling and configuration tunneling in detail. **10**
6. Write short notes on (**any Two**) : **20**
  - (a) Networking Devices
  - (b) ATM
  - (c) Congestion Control
  - (d) IPv6