

**III B.Tech II Semester Supplementary Examinations,  
November/December 2005  
COMPUTER NETWORKS  
(Electronics & Control Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions  
All Questions carry equal marks**

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1. (a) Discuss the characteristics of TCP/IP model [9]  
(b) Explain the advantages and disadvantages of various network topologies. [7]
2. (a) Sketch the ring topology used to build fiber optics LAN. [8]  
(b) What are the characteristics of base band coaxial cable. [8]
3. Discuss about different sliding window protocols. [16]
4. (a) Explain the basic bit-map method, collision-free protocol. [8]  
(b) Discuss about the fields in 802.4 frame format. [8]
5. (a) Distinguish between virtual circuit and Datagrams. [8]  
(b) Explain the steps involved in choking off the input when the subnet is overloaded. [8]
6. (a) Demonstrate with a schematic diagram, the network inter connection. [8]  
(b) Briefly discuss about the different protocol scenarios for releasing a connection. [8]
7. (a) What are the services provided by the transport layer to the sessions layer. [8]  
(b) Explain the chained fixed-size buffering. [8]
8. (a) What are the steps involved in run-length coding algorithm. [8]  
(b) Discuss about the transposition ciphers. [8]

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