

**III B.Tech II Semester Supplementary Examinations,
November/December 2005
DATA AND COMPUTER COMMUNICATIONS
(Common to Electronics & Communication Engineering and Electronics &
Telematics)**

Time: 3 hours

Max Marks: 80

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

1. (a) Draw Simplified Communication model and explain in detail.
(b) Write Short notes on transmission media. [6+10]
2. Define Modulation. What are the different types of Modulation techniques are available. Explain with examples. [16]
3. Write short notes on:
(a) Characteristics of TCP
(b) Comparison between synchronous TDM and statistical TDM. [8+8]
4. (a) Why is that the Start and Stop bits can be eliminated when character interleaving is used on Synchronous TDM?
(b) Explain in terms of DLC and Physical layer concepts, how error and flow control are accomplished in Synchronous TDM. [8+8]
5. (a) Compare and contrast the various packet switching techniques.
(b) What are the different available configurations for datagrams & virtual circuits? Explain the operation of the same. [8+8]
6. (a) What are the advantages of medium access control (MAC) protocol.
(b) Describe the MAC frame format. [6+10]
7. List and explain different transmission structures. [16]
8. (a) Distinguish the frame relay and packet-switching service.
(b) Explain the stages involved in the data transfer of frame relay connections. [8+8]
