

III B.Tech II Semester Supplementary Examinations, Apr/May 2006
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) Discuss in details the significant transmission impairment.
(b) What is the channel capacity of a teleprinter channel with a 300 MHz Bandwidth and a signal to noise ratio of 3dB. [8+8]
2. (a) Explain Delta modulation with diagram.
(b) Define and Explain Pulse Code Modulation with waveform. [8+8]
3. Explain the following :
(a) Stop-and-wait ARQ
(b) Go-back-N ARQ
(c) Selective-reject ARQ. [5+6+5]
4. Describe the frame format of SONET / SDH. [16]
5. What is meant by routing? What are the desirable characteristics of routing function and discuss the significance the same. [16]
6. (a) Discuss different topologies used in LANs.
(b) Distinguish their merits and demerits. [8+8]
7. (a) What is the objective of ISDN reference points and functional grouping?
(b) Explain in detail different functional groupings. [8+8]
8. (a) What are advantages of frame relay services over packet-switching?
(b) What is the objective of LAPF protocol? Describe the LAPF-core format. [6+10]
