

2006 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

II B.TECH II SEMESTER REGULAR EXAMINATIONS

DATA COMMUNICATIONS

(ELECTRONIC & COMPUTER ENGINEERING)

APRIL 2006

**TIME : 3 HOUR
MARK : 80**

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) Define data communications. Explain different components of a Data communication system.
(b) Define the four transmission modes for data communication circuits and explain with examples.
2. What are the various types of Data Communication codes and explain briefly about each code? [
3. (a) What is a transparent switch? A transactional switch.
(b) What are the purposes of the nr and ns sequences on SDLC? What is delimiting sequence?
4. (a) Draw the block diagram of a typical local area network component configuration and explain. What are the typical characteristics of LAN.
(b) Write range of data services, where LAN's are used extensively.
5. Discuss the role of authentication in PPP. Explain different PPP authentication protocols in detail.
6. (a) What is ISDN? Describe the services provided by it.
(b) Discuss the evolution of ISDN.
7. (a) Why is frame relay a better solution for connecting LAN's than T-1 lines?
(b) Why is the control field from HDLC totally dropped from frame relay?
(c) What is the definition of bursty data? Give example of bursty traffic.
8. Discuss the SONET configuration as a physical carrier for ATM.