

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. What is Data Communication? What are there possible ways of Data transmission and explain with examples. Draw a block diagram of Data communication system and explain its components.
2. Explain about Forward error correction method with example?
3. (a) What is a Protocol?
(b) Draw the block diagram of ISO OSI model and explain.
4. Explain about TOKEN RING system?
5. Discuss the role of authentication in PPP. Explain different PPP authentication protocols in detail.
6. (a) Differentiate between TE1 and TE2.
(b) Discuss about services and physical specification of broadband 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. Draw a SONET network using all of the following devices. Label all lines, sections and paths.
 - (a) Three STS multiplexers(Two as input and One as output)
 - (b) Four add/drop multiplexers.
 - (c) Five regenerators.