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. Draw OIS architectural model for open system inter networking and explain.

2. Explain about:

(a) Symbol substitution

(b) Retransmission in Error Correction methods.

(c) Checksum method.

3. (a) What is the Difference between selection and polling? And explain.

(b) Explain about Control field on SDLC protocol?

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. (a) What is message switching? Discuss about it.

(b) Explain two approaches used for implementation of virtual circuit transmission.

6. (a) What is ISDN? Describe the services provided by it.

(b) Discuss the evolution of ISDN.

7. (a) Discuss the frame relay physical layer.

(b) What does the DE bit have to do with congestion?

(c) How can the BECN bit inform the sender of congestion in the network?

8. (a) Elaborate on the concerns addressed by the designers of SONET.

(b) List different SONET/SDH rates.