FACULTY OF ENGINEERING
B.E. 2/4 (CSE) II Semester (Supple.) Examination, December 2009
DATA COMMUNICATIONS

Time: 3 Hours]   [Max. Marks: 75

Note : *Answer **all** questions from Part A. Answer **any five***
*questions from Part **B**.*

PART – A	(25 Marks)

1. What are the communication tasks ?   **3**

2. Define circuit switching.   **2**

3. What are the different types of noises ?   **3**

4. Differentiate between guided and unguided transmission mediums.   **3**

5. Convert the following digital data into a digital signal by using Manchester
   encoding technique.   **3**
   0 1 1 0 0 1 1 0 1 1

6. Define topology.   **2**

7. What is an error detection principle ?   **2**

8. Define multiplexing.   **3**

9. Draw the MAC frame format.   **2**

10. Compare piconet and a scatternet.   **2**

PART – B	(50 Marks)

11. a) Explain the transmission impairments.   **4**

    b) Define protocol and explain the protocol architecture.   **6**

12. Explain the HDLC frame structure in detail.   **10**

13. Explain the statistical time decision multiplexing. Compare it with other
    multiplexings.   **10**

14. a) What is CSMA/CSMACD ?   (5+5)

    b) What are Scrambling techniques ?

15. Explain pulse code modulation and delta modulation in detail.   10

16. a) Explain LAN architecture.   (6+4)

    b) What are fast ethernet ?

17. a) Write the principles of cellular networks.   (6+4)

    b) Explain IEEE 802.11 MAC protocol.