



FACULTY OF ENGINEERING  
B.E. 2/4 (CSE) II Semester (Suppl.) Examination, January 2012  
DATA COMMUNICATIONS

Time: 3 Hours]

[Max. Marks: 75

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

## PART – A

(25 Marks)

1. Explain the communication model. 3
2. Define B8ZS encoding. 2
3. How stop-and-wait algorithm works ? 3
4. What is interfacing ? 2
5. Define CSMA/CD. 3
6. What is a ATM cell ? 2
7. Define topology ? How many types of topologies are there ? 3
8. What is Ad Hoc networking ? 2
9. Compare wired LAN with wireless LAN. 3
10. Define FDDI. 2

## PART – B

(5x10=50 Marks)

11. Compare OSI model with TCP-IP model.
12. Convert the following digital data into digital signal by using.
  - a) NRZL. 2
  - b) Bipolar-AMI. 2
  - c) Manchester. 2
  - d) Differential Manchester. 4Code : 01111001101
13. Explain with neat diagram about the sliding window flow control algorithm.
14. Explain HDLC in detail.
15. Define multiplexing. Explain TDM.
16. Explain the bluetooth architecture.
17. Explain MAC frame format.